**BUILDING STANDARDS COMMISSION**
2525 Natomas Park Drive, Suite 130
Sacramento, California 95833-2936
(916) 263-0916 FAX (916) 263-0959

February 21, 2014

David A. Saldana
Director, Planning and Building Department
City of San Marino
2200 Huntington Drive
San Marino, CA 91108

RE: Ordinance #O-13-1278

Dear Mr. Saldana:

This letter is to advise you of our determination regarding the referenced ordinance with express findings received from your agency on January 21, 2014.

Our review finds the submittal to contain one ordinance modifying provisions of the 2013 California Building Standards Code in Title 24, California Code of Regulations (code), and express findings complying with Health and Safety Code §§17958.7 and 18941.5. The code modification is accepted for filing and is enforceable. This letter attests only to the satisfaction of the cited law for filing of local code amendment supported by an express finding with the Commission. The Commission is not authorized by law to evaluate the merit of the code modification or the express finding.

Local modifications to the code are specific to a particular edition of the code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the code is published.

On a related matter, should your city receive and ratify Fire Protection District ordinances making modifications to the code, be advised that Health and Safety Code §13869.7(c) requires such ratified ordinances and express findings to be filed with the Department of Housing and Community Development, Division of Codes and Standards, State Housing Law Program, rather than this Commission. Also, ordinances making modifications to the energy efficiency standards of the code may require approval from the California Energy Commission pursuant to Public Resources Code §25402.1(h)(2).

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

Enrique M. Rodriguez
Associate Construction Analyst

cc: Chron
Local Filings

# City of San Marino

Planning & Building Department

January 13, 2014

Dave Walls
California Building Standards Commission
2525 Natomas Park Dr., Suite 130
Sacramento, California 95833-2936

**SUBJECT: CITY OF SAN MARINO, BUILDING CODE ADOPTION ORDINANCE**

Dear Mr. Walls:

The City of San Marino has adopted the current Building, Residential, Green Building Standards, Plumbing, Mechanical, Electrical and Fire Codes of the State of California by reference.

The City of San Marino has also adopted amendments to the Codes. These amendments to the 2013 Edition of the California Building, Residential, Electrical, Plumbing and Fire Codes are reasonably necessary due to local climate, topographic, and geological conditions in the City of San Marino. Said amendments are of an administrative or procedural nature, or concern themselves with subjects not covered by the Code or are reasonably necessary to safeguard life and property within the City of San Marino.

The enclosed City Ordinance and Resolution are for your files. If additional information is desired please do no hesitate to contact me at (626) 300-0711.

Sincerely,

DAVID A. SALDAÑA, AICP
Director, Planning and Building Department

DAS/act

Attachment: Ordinance O-13-1278
Resolution R-13-26

2200 Huntington Drive, San Marino, CA 91108-2639 • Phone: (626) 300-0711 Fax: (626) 300-0716

**ORDINANCE NO. O-13-1278**

**AN ORDINANCE OF THE CITY OF SAN MARINO ADOPTING BY REFERENCE THE 2013 EDITIONS OF THE CALIFORNIA ADMINISTRATIVE, BUILDING, MECHANICAL, PLUMBING, ELECTRICAL, RESIDENTIAL, FIRE, ENERGY, GREEN BUILDING STANDARDS, AND REFERENCED STANDARDS CODE, WITH CERTAIN AMENDMENTS, DELETIONS AND ADDITIONS, AND AMENDING CHAPTER 25 OF THE SAN MARINO CITY CODE**

THE CITY COUNCIL OF THE CITY OF SAN MARINO DOES HEREBY ORDAIN AS FOLLOWS:

**SECTION 1.** Articles 02 through 06, and Articles 09, 10, 12, 13, and 14 of Chapter 25, the "Uniform Codes" of the San Marino City Code, adopting by reference the 2013 Editions of the California Building, Mechanical, Plumbing, Electrical, Energy, Fire, Administrative, Residential, Green Building Standards, and Referenced Standards Code, and amendments thereto, are hereby repealed; provided, however, that such repeal shall not affect or excuse any violation of any of said codes occurring prior to the effective date of this ordinance.

**SECTION 2.** New Article 02 Building Code is hereby added to Chapter 25 of the San Marino City Code to read as follows:

**Article 02**

**BUILDING CODE**

**SECTION:**

| | |
|---|---|
| **25.02.22** | **Amendment of Section 1807.1.4** |
| **25.02.23** | **Amendment of Section 1807.1.6** |
| **25.02.24** | **Amendment of Section 1809.3** |
| **25.02.25** | **Amendment of Section 1809.7 and Table 1809.7** |
| **25.02.26** | **Amendment of Section 1809.12** |
| **25.02.27** | **Amendment of Section 1810.3.2.4** |
| **25.02.28** | **Amendment of Section 1905.1.3** |
| **25.02.29** | **Amendment of Section 1905.1.8** |
| **25.02.30** | **Amendment of Section 1905.1 and Addition of Sections 1905.1.10 through 1905.1.12** |
| **25.02.31** | **Amendment of Section 2304.9.1** |
| **25.02.32** | **Amendment of Section 2304.11.7** |
| **25.02.33** | **Amendment of Section 2305.4** |
| **25.02.34** | **Amendment of Section 2305.5** |
| **23.02.35** | **Amendment of Section 2306.2** |
| **23.02.36** | **Amendment of Section 2506.3 and Addition of Section 2307.2** |
| **23.02.37** | **Amendment of Section 2308.3.4** |
| **23.02.38** | **Amendment of Sections 2308.9.3.1, 2308.9.3.2 and Figure 2308.9.3.2** |
| **23.02.39** | **Amendment of Table 2308.12.4** |
| **23.02.40** | **Amendment of Section 2308.12.5** |
| **23.02.41** | **Amendment of Section 3109.4.1 and Addition of Section 3109.4.1.7.1** |

**25.02.01: BUILDING CODE ADOPTED:**

A. CODE ADOPTED: The California Building Code, 2013 Edition, based on the 2012 International Building Code as published by the International Code Council, including all appendices, is hereby adopted by reference, and together with certain amendments and deletions, shall constitute the Building Code of the City. A copy of said Code shall be located in the Planning and Building Department and shall be, at all times, maintained for use and examination by the public.

B. BUILDING OFFICIAL DEFINED: For the purpose of this Code, the Planning and Building Director shall be the Building Official of his designee.

**25.02.02: AMENDMENT OF SECTION 114.1:** Notwithstanding the provisions of Section 25.02.01 of this Article, Section 114.1 of the Building Code is amended to read as follows:

**114.1 Unlawful acts.** It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert, demolish, equip, use, occupy, or maintain any building, structure or equipment or cause or permit the same to be done in violation of the Building Code.

It is hereby declared that any violation of the Building Code constitutes a public nuisance, and in addition to any other remedies provided by the Building Code for its enforcement, the City Council may bring civil suit to enjoin the violation of any provisions of this Building Code.

Any person, firm or corporation violating any of the provisions of the Building Code shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punishable as provided in Section 01.04.03A of this Code. Each separate day or any portion thereof during which violation of the Building Code occurs or continues shall be deemed to constitute a separate offense, and upon conviction thereof shall be punishable as herein provided.

**25.02.03: AMENDMENT OF SECTION 113.1**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 113.1 of the Building Code is amended to read as follows:

**113.1 General.** In order to hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretation of this Code, there shall be and is hereby created a Board of Appeals consisting of the members of the City Council. The Building Official shall be an ex officio member and shall act as Secretary to said Board but shall have no vote on any matter before the Board. The Board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings, in writing, to the appellant with a duplicate copy to the Building Official. The Board may request the services of members of the community who are qualified by experience and training to interpret matters pertaining to the Building Code to act as technical assistants to the Board. Technical assistants shall have no vote on any matter before the Board.

**25.02.04: AMENDMENT OF SECTIONS 109.2 AND 109.6**: Notwithstanding the provisions of Section 25.02.01 of this Article, Sections 109.2 and 109.6 of the Building Code are amended to read as follows:

**109.2 Schedule of permit fees.** The fee for each permit shall be as periodically established by City Council resolution.

**109.2.1 Plan review fees.** When plans or other data are required pursuant Section 107.1, a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be 100 percent of the building permit fee established by resolution of the City Council.

**109.2.2 Expiration of plan review.** Applications for which no permit is issued within 180 days following the date the application or the date of final approval, if one exists, shall expire by limitation, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the Building Official. The Building Official may extend the time for action by the applicant for a period not exceeding 180 days on written request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee.

**109.2.3 Expiration of building permits.** Building permit expiration dates are based on project valuation according to the following schedule:

| VALUATION | PERMIT EXPIRATION DATE |
|---|---|
| Up to $50,000 | 6 months |

| | |
|---|---|
| $50,000 - $100,000 | 9 months |
| $100,001 - $250,000 | 12 months |
| $250,001 and over | 15 months |

The Building Official may extend the permit expiration date for a period not exceeding 180 days on written request (submitted prior to the expiration date) by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once.

If an applicant wishes to renew a permit that has been expired for less than 6 months, 50% of the original fees paid shall be required to renew the permit. If an applicant wishes to renew a permit that has been expired for more than 6 months, 100% of the original fees paid shall be required to renew the permit.

**109.6 Fee refunds.** The Building Official may authorize refunding of any fee paid hereunder that was erroneously paid or collected.

The Building Official may authorize the refunding of not more than 80% of the permit fee paid when no work has been done under a permit in accordance with the Building code.

The Building Official shall not authorize refunding of any fee paid except on written application filed by the original permittee within 60 days of the date of fee payment.

**25.02.05: ADDITION OF SECTIONS 110.3.3.1, 110.3.9.1 AND 110.3.11:** Notwithstanding the provisions of Section 25.02.01 of this Article, new Sections 110.3.3.1, 110.3.9.1 and 110.3.11 are added to the Building Code to read as follows:

**110.3.3.1** Prior to frame approval, an rough zoning inspection is required in order to ensure compliance with the approved Development Plans.

**110.3.9.1** Prior to final approval, a final zoning inspection is required in order to ensure final compliance with approved Development Plans.

**110.3.11 Connections prohibited.** Unless approval has been first obtained from the Building Official, the connection of gas or electrical utilities shall be prohibited until the final zoning, building, heating, air conditioning, electrical, plumbing and grading inspections, as required, are completed and approval has been granted on any building.

**25.02.06: AMENDMENT OF SECTION 111.1**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 111.1 of the Building Code is amended to read as follows:

**111.1 Use or Occupancy.** No building or structure shall be used or occupied, and no change in the existing occupancy classification, tenancy, or change in proprietorship of a building or structure or portion thereof shall be made until the Building Official has issued a Certificate of Occupancy therefore as provided herein.

Exception: Group R, Division 3 and Group U occupancies.

Issuance of a Certificate of Occupancy shall not be construed as an approval of a violation of the provisions of the Building Code or of other ordinances of the City. Certificates presuming to give authority to violate or cancel the provisions of the Building Code or other ordinances of the City shall not be valid.

**25.02.07: AMENDMENT OF SECTION 302.1**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 302.1 of the Building Code is amended by adding a new paragraph to read as follows:

Any buildings or structures hereafter erected or constructed on C-1 zoned property shall be constructed of one-hour fire resistive construction throughout.

This Section shall apply to:

1. Construction of any new building.

2. Addition, renovation or remodeling of any existing building when the value thereof is more that twenty percent (20%) of the estimated value of the existing building. The value of the proposed addition, renovation or remodeling shall be cumulative of all such renovation or remodeling over five (5) years.

The value of the proposed construction and of the existing building shall be determined by the Planning and Building Department based upon the latest edition of the Building Valuation Data as published by the International Code Council.

**25.02.08: ADDITION OF SECTION 312.2**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 312.2 is added to the Building Code to read as follows:

**312.2 Garage access.** To provide a secondary means of egress from a private garage, a door, minimum 2'6" x 6'8" dimensions, shall be provided in addition to the automobile access door or doors.

**25.02.09: ADDITION OF SECTION 312.3**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 312.3 is added to the Building Code to read as follows:

**312.3 Garage floor surfaces.** In areas where motor vehicles are stored or operated, floor surface shall be concrete, and shall be a minimum 3-1/2 inches thick. No other floor coverings are permitted.

**25.02.10: AMENDMENT OF SECTION 1501.1**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1501.1 of the Building Code is amended by adding a new paragraph following the first sentence to read as follows:

In the areas classified as Very High Fire Hazard Severity Zones, all new roofs and reroofs of more than fifty percent (50%) of the existing roof area within one year shall, be minimum Class "A" roofs.

In all other areas, a new roof with a minimum Class "B" classification shall be installed over the entire structure whenever the livable area is increased by 50% or more.

Reroofing over an existing roof is not permitted unless the roofing is specifically approved in the classification required over existing substrate. Evidence of such approval must be submitted at the time of permit issuance. Fire severity zones are established by the Fire Department and the California Department of Forestry and Fire Protection.

**25.02.11: AMENDMENT OF SECTION 1505.1.3**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1505.1.3 of the Building Code is amended by requiring minimum Class "B" roofing for all types of construction for Group A-3, B, M and R-3 Occupancies.

**25.02.12: ADDITION OF SECTION 1507.2.5.1**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1507.2.5.1 is added to the Building Code to read as follows:

**1507.2.5.1** Not more than one overlay of asphalt shingles shall be applied over an existing asphalt or wood shingle roof. Asphalt shingles applied over wood shingles shall not have less than Type 30 nonperforated felt underlayment installed prior to reroofing.

**25.02.13: AMENDMENT OF SECTION 1507.3.1**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1507.3.1 of the Building Code is amended to read as follows:

**1507.3.1 Deck requirements.** Concrete and clay tile shall be installed only over solid structural sheathing boards.

**25.02.14: ADDITION OF SECTION 1613.6**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1613.6 is added to the Building Code to read as follows:

1613.6 ASCE 7, 12.12.3 Modify ASCE 7 Equation 12.12-1 of Section 12.12.3 to read as follows:

$$\delta_M = \frac{C_d \delta_{max}}{I_e} \qquad (12.12\text{-}1)$$

**25.02.15: ADDITION OF SECTION 1613.7**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1613.7 is added to the Building Code to read as follows:

**1613.7 ASCE 7**, 12.2.3.1, Exception 3. Modify ASCE 7 Section 12.2.3.1 Exception 3 to read as follows:

3. Detached one- and two-family dwellings up to two stories in height of light frame construction.

**25.02.16: ADDITION OF SECTION 1613.8**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1613.8 is added to the Building Code to read as follows:

**1613.8 ASCE 7**, Section 12.11.2.2.3. Modify ASCE 7, Section 12.11.2.2.3 to read as follows:

**12.11.2.2.3 Wood Diaphragms**. In wood diaphragms, the continuous ties shall be in

addition to the diaphragm sheathing. Anchorage shall not be accomplished by use of toe nails or nails subject to withdrawal nor shall wood ledgers or framing be used in cross-grain bending or cross-grain tension. The diaphragm sheathing shall not be considered effective as providing ties or struts required by this section.

For structures assigned to Seismic Design Category D, E or F, wood diaphragms supporting concrete or masonry walls shall comply with the following:

1. The spacing of continuous ties shall not exceed 40 feet. Added chords of diaphragms may be used to form subdiaphragms to transmit the anchorage forces to the main continuous crossties.

2. The maximum diaphragm shear used to determine the depth of the subdiaphragm shall not exceed 75% of the maximum diaphragm shear.

**25.02.17: ADDITION OF SECTION 1613.10:** Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1613.10 is added to the Building Code to read as follows:

**1613.10 Suspended Ceilings.** Minimum design and installation standards for suspended ceilings shall be determined in accordance with the requirements of Section 2506.2.1 of this Code and this section.

**1613.10.1 Scope.** This part contains special requirements for suspended ceilings and lighting systems. Provisions of Section 13.5.6 of ASCE 7-10 shall apply except as modified herein.

**1613.10.2 General.** The suspended ceilings and lighting systems shall be limited to 6 feet (1828 mm) below the structural deck unless the lateral bracing is designed by a licensed engineer or architect.

**1613.10.3 Sprinkler Heads.** All sprinkler heads (drops) except fire-resistance-rated floor/ceiling or roof/ceiling assemblies, shall be designed to allow for free movement of the sprinkler pipes with oversize rings, sleeves or adaptors through the ceiling tile. Sprinkler heads and other penetrations shall have a 2 in. (50mm) oversize ring, sleeve, or adapter through the ceiling tile to allow for free movement of at least 1 in. (25mm) in all horizontal directions. Alternatively, a swing joint that can accommodate 1 in. (25 mm) of ceiling movement in all horizontal directions is permitted to be provided at the top of the sprinkler head extension.

Sprinkler heads penetrating fire-resistance-rated floor/ceiling or roof/ceiling assemblies shall comply with Section 714 of this Code.

**1613.10.4 Special Requirements for Means of Egress.** Suspended ceiling assemblies located along means of egress serving an occupant load of 30 or more shall comply with the following provisions.

**1613.10.4.1 General.** Ceiling suspension systems shall be connected and braced with vertical hangers attached directly to the structural deck along the means of egress serving an

occupant load of 30 or more and at lobbies accessory to Group A Occupancies. Spacing of vertical hangers shall not exceed 2 feet (610 mm) on center along the entire length of the suspended ceiling assembly located along the means of egress or at the lobby.

**1613.10.4.2 Assembly Device.** All lay-in panels shall be secured to the suspension ceiling assembly with two hold-down clips minimum for each tile within a 4-foot (1219 mm) radius of the exit lights and exit signs.

**1613.10.4.3 Emergency Systems.** Independent supports and braces shall be provided for light fixtures required for exit illumination. Power supply for exit illumination shall comply with the requirements of Section 1006.3 of this Code.

**1613.10.4.4 Supports for Appendage.** Separate support from the structural deck shall be provided for all appendages such as light fixtures, air diffusers, exit signs, and similar elements.

**25.02.18: AMENDMENT OF SECTION 1704.5.1:** Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1704.5.1 of the Building Code is amended to read as follows:

**1704.5.1 Structural observations for seismic resistance.** Structural observations shall be provided for those structures assigned to Seismic Design Category D, E or F, where one or more of the following conditions exist:

1. The structure is classified as Risk Category III or IV in accordance with Table 1604.5.

2. The height of the structure is greater than 75 feet (22860 mm) above the base.

3. The structure is classified as Risk Category I or II in accordance with Table 1604.5, and a lateral design is required for the structure or portion thereof.

**Exception**: One-story wood framed Group R-3 and Group U Occupancies less than 2,000 square feet in area, provided the adjacent grade is not steeper than 1 unit vertical in 10 units horizontal (10% sloped), assigned to Seismic Design Category D.

4. When so designated by the registered design professional responsible for the structural design.

5. When such observation is specifically required by the building official.

**25.02.19: AMENDMENT OF SECTION 1705.3:** Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1705.3 of the Building Code is amended to read as follows:

**1705.3 Concrete Construction.** The special inspections and verifications for concrete construction shall be as required by this section and Table 1705.3.

**Exceptions**: Special inspection shall not be required for:

Isolated spread concrete footings of buildings three stories or less above grade plane that are fully supported on earth or rock, where the structural design of the footing is based on a specified compressive strength, f'c, no greater than 2,500 pounds per square inch (psi) (17.2 Mpa) regardless of the compressive strength specified in the construction documents or used in the footing construction.

2. Continuous concrete footings supporting walls of buildings three stories or less in height that are fully supported on earth or rock where:

2.1. The footings support walls of light-frame construction;

2.2. The footings are designed in accordance with Table 1805.4.2; or

2.3. The structural design of the footing is based on a specified compressive strength, f'c, no greater than 2,500 pounds per square inch (psi) (17.2 Mpa), regardless of the compressive strength specified in the construction documents or used in the footing construction.

3. Nonstructural concrete slabs supported directly on the ground, including prestressed slabs on grade, where the effective prestress in the concrete is less than 150 psi (1.03 Mpa).

4. Concrete patios, driveways and sidewalks, on grade.

Table 1705.3 of the 2013 Edition of the California Building Code is amended to read as follows:

**TABLE 1705.3**
**REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION**

| VERIFICATION AND INSPECTION | CONTINOUS | PERIODIC | REFERENCE STANDARDa | IBC REFERENCE |
|---|---|---|---|---|
| 3. Inspection of anchors cast in concrete where allowable loads have been increased or where strength design is used. | – | X | ACI 318: D.9.2 8.1.3, 21.1.8 | 1908.5, 1909.1 |
| 4. Inspection of anchors post-installed in hardened concrete membersb. | – | X | ACI 318: 3.8.6, 8.1.3, 21.1.8 | 1909.1 |
| Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads. | X | | ACI 318:D.9.2.4 | – |
| Mechanical anchors and adhesive anchors not defined in 4.a. | | X | ACI 318: D.9.2 | – |

b. Specific requirements for special inspection shall be included in the research report for the anchor issued by an

approved source in accordance with ACI 355.2 D.9.2 in ACI 318, or other qualification procedures. Where specific requirements are not provided, special inspection requirements shall be specified by the registered design professional and shall be approved by the building official prior to the commencement of the work.

(Portions of table not shown remain unchanged.)

**25.02.20: AMENDMENT OF SECTION 1705.11**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1705.11 of the Building Code is amended to read as follows:

**1705.11 Special inspections for seismic resistance.** Special inspections itemized in Sections 1705.11.1 through 1705.11.8, unless exempted by the exceptions of Section 1704.2, are required for the following:

1. The seismic force-resisting systems in structures assigned to Seismic Design Category C, D, E or F in accordance with Sections 1705.11.1 through 1705.11.3, as applicable.

2. Designated seismic systems in structures assigned to Seismic Design Category C, D, E or F in accordance with Section 1705.11.4.

3. Architectural, mechanical and electrical components in accordance with Sections 1705.11.5 and 1705.11.6.

4. Storage racks in structures assigned to Seismic Design Category D, E or F in accordance with Section 1705.11.7.

5. Seismic isolation systems in accordance with Section 1705.11.8.

**Exception**: Special inspections itemized in Sections 1705.11.1 through 1705.11.8 are not required for structures designed and constructed in accordance with one of the following:

1. The structure consists of light-frame construction; the design spectral response acceleration at short periods, SDS, as determined in Section 1613.3.4, does not exceed 0.5; and the building height of the structure does not exceed 35 feet (10 668 mm)

2. The seismic force-resisting system of the structure consists of reinforced masonry or reinforced concrete; the design spectral response acceleration at short periods, SDS, as determined in Section 1613.3.4, does not exceed 0.5; and the building height of the structure does not exceed 25 feet (7620 mm)

3. The structure is a detached one- or two-family dwelling not exceeding two stories above grade plane, is not assigned to Seismic Design Category D, E or F and does not have any of the following horizontal or vertical irregularities in accordance with Section 12.3 of ASCE 7:

3.1 Torsional or extreme torsional irregularity.

3.2 Nonparallel systems irregularity.

3.3 Stiffness-soft story or stiffness-extreme soft story irregularity.

3.4 Discontinuity in lateral strength-weak story irregularity.

**25.02.21: AMENDMENT OF SECTION 1711.1.1, 1711.1.2, and Chapter 35:** Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1711.1.1, Section 1711.1.2 and certain referenced standards in Chapter 35 of the Building Code are amended to read as follows:

**1711.1.1 General.** The vertical load-bearing capacity, torsional moment capacity and deflection characteristics of joist hangers shall be determined in accordance with ASTM D 1761 and ASTM D 7147 as specified below using lumber having a specific gravity of 0.49 or greater, but not greater than 0.55, as determined in accordance with AF&PA NDS for the joist and headers.

**Exception**: The joist length shall not be required to exceed 24 inches (610 mm).

**1711.1.2 Vertical load capacity for joist hangers.** The vertical load-bearing capacity for the joist hanger shall be determined by testing a minimum of three joist hanger assemblies as specified in ASTM D 1761 or ASTM D 7147. If the ultimate vertical load for any one of the tests varies more than 20 percent from the average ultimate vertical load, at least three additional tests shall be conducted. The allowable vertical load-bearing of the joist hanger shall be the lowest value determined from the following:

1. The lowest ultimate vertical load for a single hanger from any test divided by three (where three tests are conducted and each ultimate vertical load does not vary more than 20 percent from the average ultimate vertical load).

2. The average ultimate vertical load for a single hanger from all tests divided by three (where six or more tests are conducted).

3. The average from all tests of the vertical loads that produce a vertical movement of the joist with respect to the header of 1/8 inch (3.2 mm).

4. The sum of the allowable design loads for nails or other fasteners utilized to secure the joist hanger to the wood members and allowable bearing loads that contribute to the capacity of the hanger.

5. The allowable design load for the wood members forming the connection.

**Amend the following Reference Standards in Chapter 35 for ASTM as follows:**

| | | |
|---|---|---|
| D 1761-88(2000) ε1 | Test Method for Mechanical Fasteners in Wood | 1711.1.1<br>1711.1.2<br>1711.1.3 |
| D 7147-05 | Standard Specification for Testing and Establishing Allowable Loads of Joist Hangers | 1711.1.1<br>1711.1.2 |

**25.02.22: AMENDMENT OF SECTION 1807.1.4**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1807.1.4 of the Building Code is amended to read as follows:

**1807.1.4 Permanent wood foundation systems**. Permanent wood foundation systems shall be designed and installed in accordance with AF&PA PWF. Lumber and plywood shall be treated in accordance with AWPA U1 (Commodity Specification A, Use Category 4B and Section 5.2) and shall be identified in accordance with Section 2303.1.8.1. Permanent wood foundation systems shall not be used for structures assigned to Seismic Design Category D, E or F.

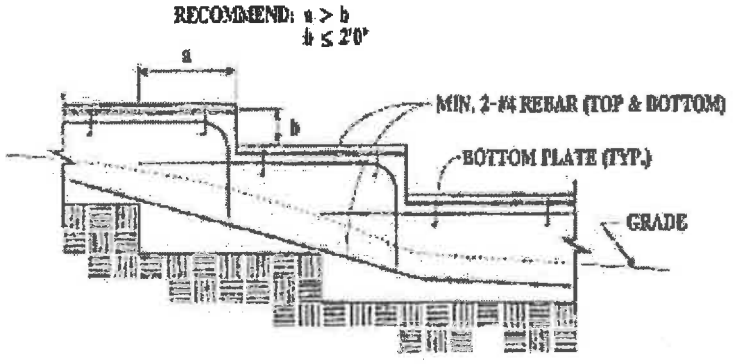
**25.02.23: AMENDMENT OF SECTION 1807.1.6**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1807.1.6 of the Building Code is amended to read as follows:

**1807.1.6 Prescriptive design of concrete and masonry foundation walls**. Concrete and masonry foundation walls that are laterally supported at the top and bottom shall be permitted to be designed and constructed in accordance with this section. Prescriptive design of foundation walls shall not be used for structures assigned to Seismic Design Category D, E or F.

**25.02.24: AMENDMENT OF SECTION 1809.3**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1809.3 of the Building Code is amended to read as follows:

**1809.3 Stepped footings**. The top surface of footings shall be level. The bottom surface of footings shall be permitted to have a slope not exceeding one unit vertical in 10 units horizontal (10-percent slope). Footings shall be stepped where it is necessary to change the elevation of the top surface of the footing or where the surface of the ground slopes more than one unit vertical in 10 units horizontal (10-percent slope).

For structures assigned to Seismic Design Category D, E or F, the stepping requirement shall also apply to the top surface of grade beams supporting walls. Footings shall be reinforced with four No. 4 rebar. Two bars shall be place at the top and bottom of the footings as shown in Figure 1809.3.




STEPPED FOUNDATIONS

FIGURE 1809.3
STEPPED FOOTING

**25.02.25: AMENDMENT OF SECTION 1809.7 and TABLE 1809.7**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1809.7 and Table 1809.7 of the Building Code are amended to read as follows:

**1809.7 Prescriptive footings for light-frame construction.** Where a specific design is not provided, concrete or masonry-unit footings supporting walls of light-frame construction shall be permitted to be designed in accordance with Table 1809.7. Prescriptive footings in Table 1809.7 shall not exceed one story above grade plane for structures assigned to Seismic Design Category D, E or F.

**TABLE 1809.7**
**PRESCRIPTIVE FOOTINGS SUPPORTING WALLS OF LIGHT-FRAME CONSTRUCTION a, b, c, d, e**

| NUMBER OF FLOORS SUPPORTED BY THE FOOTING f | WIDTH OF FOOTING (inches) | THICKNESS OF FOOTING (inches) |
|---|---|---|
| 1 | 12 | 6 |
| 2 | 15 | 6 |
| 3 | 18 | 8 g |

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm

a. Depth of footings shall be in accordance with Section 1809.4.
b. The ground under the floor shall be permitted to be excavated to the elevation of the top of the footing.
c. Not Adopted.
d. See Section 1908 for additional requirements for concrete footings of structures assigned to Seismic Design Category C, D, E or F.
e. For thickness of foundation walls, see Section 1807.1.6.
f. Footings shall be permitted to support a roof addition to the stipulated number of floors. Footings supporting roof only shall be as required for supporting one floor.

**25.02.26: AMENDMENT OF SECTION 1809.12**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1809.12 of the Building Code is amended to read as

follows:

**1809.12 Timber footings.** Timber footings shall be permitted for buildings of Type V construction and as otherwise approved by the building official. Such footings shall be treated in accordance with AWPA U1 (Commodity Specification A, Use Category 4B). Treated timbers are not required where placed entirely below permanent water level, or where used as capping for wood piles that project above the water level over submerged or marsh lands. The compressive stresses perpendicular to grain in untreated timber footing supported upon treated piles shall not exceed 70 percent of the allowable stresses for the species and grade of timber as specified in the AF&PA NDS. Timber footings shall not be used in structures assigned to Seismic Design Category D, E or F.

**25.02.27: AMENDMENT OF SECTION 1810.3.2.4**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1810.3.2.4 of the Building Code is amended to read as follows:

**1810.3.2.4 Timber.** Timber deep foundation elements shall be designed as piles or poles in accordance with AF&PA NDS. Round timber elements shall conform to ASTM D 25. Sawn timber elements shall conform to DOC PS-20. Timber shall not be used in structures assigned to Seismic Design Category D, E or F.

**25.02.28: AMENDMENT OF SECTION 1905.1.3**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1905.1.3 of the Building Code is amended to read as follows:

**1905.1.3 ACI 318, Section 21.4.** Modify ACI 318, Section 21.4, by renumbering Section 21.4.3 to become 21.4.4 and adding new Sections 21.4.3, 21.4.5, 21.4.6 and 21.4.7 to read as follows:

21.4.3 – Connections that are designed to yield shall be capable of maintaining 80 percent of their design strength at the deformation induced by the design displacement or shall use Type 2 mechanical splices.

21.4.4 – Elements of the connection that are not designed to yield shall develop at least 1.5 Sy.

21.4.5 – In structures assigned to Seismic Design Category D, E or F, intermediate precast wall panels and wall piers shall be designed in accordance with Section 21.9 or 21.13.

21.4.6 – Wall piers not designed as part of a moment frame in buildings assigned to Seismic Design Category C shall have transverse reinforcement designed to resist the shear forces determined from 21.3.3. Spacing of transverse reinforcement shall not exceed 8 inches (203 mm). Transverse reinforcement shall be extended beyond the pier clear height for at least 12 inches (305 mm).

**Exceptions:**

1. Wall piers that satisfy 21.13.

2. Wall piers along a wall line within a story where other shear wall segments provide lateral support to the wall piers and such segments have a total stiffness of at least six times the sum of the stiffnesses of all the wall piers.

21.4.7 – Wall segments with a horizontal length-to-thickness ratio less than 2.5 shall be designed as columns.

**25.02.29: AMENDMENT OF SECTION 1905.1.8**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1905.1.8 of the Building Code is amended to read as follows:

**1905.1.8 ACI 318, Section 22.10**. Delete ACI 318, Section 22.10, and replace with the following:

22.10 – Plain concrete in structures assigned to Seismic Design Category C, D, E or F.

22.10.1 – Structures assigned to Seismic Design Category C, D, E or F shall not have elements of structural plain concrete, except as follows:

(a) Concrete used for fill with a minimum cement content of two (2) sacks of Portland cement or cementious material per cubic yard.

(b) Isolated footings of plain concrete supporting pedestals or columns are permitted, provided the projection of the footing beyond the face of the supported member does not exceed the footing thickness.

(c) Plain concrete footings supporting walls are permitted provided the footings have at least two continuous longitudinal reinforcing bars. Bars shall not be smaller than No. 4 and shall have a total area of not less than 0.002 times the gross cross-sectional area of the footing. A minimum of one bar shall be provided at the top and bottom of the footing. Continuity of reinforcement shall be provided at corners and intersections.

In detached one- and two-family dwellings three stories or less in height and constructed with stud-bearing walls, are permitted to have plain concrete footings with at least two continuous longitudinal reinforcing bars not smaller than No. 4 are permitted to have a total area of less than 0.002 times the gross cross-sectional area of the footing.

**25.02.30: AMENDMENT OF SECTION 1905.1 AND ADDITION OF SECTION 1905.1.10 THROUGH 1905.1.12**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 1905.1 is amended and Sections 1905.1.10 through 1905.1.12 are added to the Building Code to read as follows:

**1905.1 General**. The text of ACI 318 shall be modified as indicated in Sections 1905.1.1 through 1905.1.12.

**1905.1.10 ACI 318, Section 21.6.4**. Modify ACI 318, Section 21.6.4, by adding Section 21.6.4.8 and 12.6.4.9 as follows:

21.6.4.8 Where the calculated point of contraflexure is not within the middle half of the member clear height, provide transverse reinforcement as specified in ACI 318 Sections 21.6.4.1, Items (a) through (c), over the full height of the member.

21.6.4.9 – At any section where the design strength, φPn, of the column is less than the sum of the shears Ve computed in accordance with ACI 318 Sections 21.5.4.1 and 21.6.5.1 for all the beams framing into the column above the level under consideration, transverse reinforcement as specified in ACI 318 Sections 21.6.4.1 through 21.6.4.3 shall be provided. For beams framing into opposite sides of the column, the moment components are permitted to be assumed to be of opposite sign. For the determination of the design strength, φPn, of the column, these moments are permitted to be assumed to result from the deformation of the frame in any one principal axis.

**1905.1.11 ACI 318, Section 21.9.4**. Modify ACI 318, Section 21.9.4, by adding Section 21.9.4.6 as follows:

21.9.4.6 – Walls and portions of walls with Pu > 0.35Po shall not be considered to contribute to the calculated shear strength of the structure for resisting earthquake-induced forces. Such walls shall conform to the requirements of ACI 318 Section 21.13.

**1905.1.12 ACI 318, Section 21.11.6**. Modify ACI 318, by adding Section 21.11.6.1as follows:

21.11.6.1 Collector and boundary elements in topping slabs placed over precast floor and roof elements shall not be less than 3 inches (76 mm) or 6 db in thickness, where db is the diameter of the largest reinforcement in the topping slab.

**25.02.31: AMENDMENT OF SECTION 2304.9.1**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 2304.9.1 of the 2013 Edition of the California Building Code is amended to read as follows:

2304.9.1 Fastener requirements. Connections for wood members shall be designed in accordance with the appropriate methodology in Section 2301.2. The number and size of fasteners connecting wood members shall not be less than that set forth in Table 2304.9.1. Staple fasteners in Table 2304.9.1 shall not be used to resist or transfer seismic forces in structures assigned to Seismic Design Category D, E or F.

**Exception**: Staples may be used to resist or transfer seismic forces when the allowable shear values are substantiated by cyclic testing and approved by the building official.

**25.02.32: AMENDMENT OF SECTION 2304.11.7**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 2304.11.7 of the Building Code is amended to read as follows:

**2304.11.7 Wood used in retaining walls and cribs**. Wood installed in retaining or crib walls shall be preservative treated in accordance with AWPA U1 (Commodity Specifications A

or F) for soil and fresh water use. Wood shall not be used in retaining or crib walls for structures assigned to Seismic Design Category D, E or F.

**25.02.33: ADDITION OF SECTION 2305.4**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 2305.4 is added to the Building Code to read as follows:

**2305.4 Quality of nails**. In Seismic Design Category D, E or F, mechanically driven nails used in wood structural panel shear walls shall meet the same dimensions as that required for hand-driven nails, including diameter, minimum length and minimum head diameter. Clipped head or box nails are not permitted in new construction. The allowable design value for clipped head nails in existing construction may be taken at no more than the nail-head-area ratio of that of the same size hand-driven nails.

**25.02.34: ADDITION OF SECTION 2305.5**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 2305.5 is added to the Building Code to read as follows:

**2305.5 Hold-down connectors**. In Seismic Design Category D, E or F, hold-down connectors shall be designed to resist shear wall overturning moments using approved cyclic load values or 75 percent of the allowable seismic load values that do not consider cyclic loading of the product. Connector bolts into wood framing shall require steel plate washers on the post on the opposite side of the anchorage device. Plate size shall be a minimum of 0.229 inch by 3 inches by 3 inches (5.82 mm by 76 mm by 76 mm) in size. Hold-down connectors shall be tightened to finger tight plus one half (1/2) wrench turn just prior to covering the wall framing.

**25.02.35: AMENDMENT OF SECTION 2306.2**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 2306.2 of the Building Code is amended to read as follows:

**2306.2 Wood-frame diaphragms**. Wood-frame diaphragms shall be designed and constructed in accordance with AF&PA SDPWS. Where panels are fastened to framing members with staples, requirements and limitations of AF&PA SDPWS shall be met and the allowable shear values set forth in Table 2306.2(1) or 2306.2(2) shall only be permitted for structures assigned to Seismic Design Category A, B, or C.

**Exception**: Allowable shear values where panels are fastened to framing members with staples may be used if such values are substantiated by cyclic testing and approved by the building official.

The allowable shear values in Tables 2306.2(1) and 2306.2(2) are permitted to be increased 40 percent for wind design.

**Exception**: [DSA-SS, DSA-SS/CC and OSHPD 1, 2 &4] Wood structural panel diaphragms using staples as fasteners are not permitted by DSA and OSHPD.

Wood structural panel diaphragms used to resist seismic forces in structures assigned to Seismic Design Category D, E or F shall be applied directly to the framing members.

**Exception**: Wood structural panel diaphragms are permitted to be fastened over solid lumber planking or laminated decking, provided the panel joints and lumber planking or laminated decking joints do not coincide.

**25.02.36: AMENDMENT OF SECTION 2306.3 AND ADDITION OF SECTION 2307.2**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 2306.3 is amended and Section 2307.2 is added to the Building Code to read as follows:

**2306.3 Wood-frame shear walls.** Wood-frame shear walls shall be designed and constructed in accordance with AF&PA SDPWS. For structures assigned to Seismic Design Category D, E, or F, application of Tables 4.3A and 4.3B of AF&PA SDPWS shall include the following:

1. Wood structural panel thickness for shear walls shall not be less than 3/8 inch thick and studs shall not be spaced at more than 16 inches on center.

2. The maximum nominal unit shear capacities for 3/8 inch wood structural panels resisting seismic forces in structures assigned to Seismic Design Category D, E or F is 400 pounds per linear foot (plf).

**Exception**: Other nominal unit shear capacities may be permitted if such values are substantiated by cyclic testing and approved by the building official.

3. Where shear design values using allow stress design (ASD) exceed 350 plf or load and resistance factor design (LRFD) exceed 500 plf, all framing members receiving edge nailing from abutting panels shall not be less than a single 3-inch nominal member, or two 2-inch nominal members fastened together in accordance with Section 2306.1 to transfer the design shear value between framing members. Wood structural panel joint and sill plate nailing shall be staggered at all panel edges. See Section 4.3.6.1 and 4.3.6.4.3 of AF&PA SDPWS for sill plate size and anchorage requirements.

4. Nails shall be placed not less than 1/2 inch in from the panel edges and not less than 3/8 inch from the edge of the connecting members for shear greater than 350 plf using ASD or 500 plf using LRFD. Nails shall be placed not less than 3/8 inch from panel edges and not less than 1/4 inch from the edge of the connecting members for shears of 350 plf or less using ASD or 500 plf or less using LRFD.

5. Table 4.3B application is not allowed for structures assigned to Seismic Design Category D, E, or F.

For structures assigned to Seismic Design Category D, application of Table 4.3C of AF&PA SDPWS shall not be used below the top level in a multi-level building for structures.

Where panels are fastened to framing members with staples, requirements and limitations of AF&PA SDPWS shall be met and the allowable shear values set forth in Table 2306.3(1), 2306.3(2) or 2306.3(3) shall only be permitted for structures assigned to Seismic Design Category A, B, or C.

**Exception**: Allowable shear values where panels are fastened to framing members with staples may be used if such values are substantiated by cyclic testing and approved by the building official.

The allowable shear values in Tables 2306.3(1) and 2306.3(2) are permitted to be increased 40 percent for wind design. Panels complying with ANSI/APA PRP-210 shall be permitted to use design values for Plywood Siding in the AF&PA SDPWS.

**Exception**: [DSA-SS 7DSA-SS/CC and OSHPD 1, 2 &4] Wood structural panel shear walls using staples as fasteners are not permitted by DSA and OSHPD.

**2307.2 Wood-frame shear walls**. Wood-frame shear walls shall be designed and constructed in accordance with Section 2306.3 as applicable.

**25.02.37: AMENDMENT OF SECTION 2308.3.4**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 2308.3.4 of the Building Code is amended to read as follows:

**2308.3.4 Braced wall line support**. Braced wall lines shall be supported by continuous foundations.

**Exception**: For structures with a maximum plan dimension not over 50 feet (15240 mm), continuous foundations are required at exterior walls only for structures assigned to Seismic Design Category A, B, or C.

**25.02.38: AMENDMENT OF SECTION 2308.9.3.1, 2308.9.3.2 AND FIGURE 2308.9.3.2**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 2308.9.3.1, Section 2308.9.3.2 and Figure 2308.9.3.2 of the Building Code are amended to read as follow:

**2308.9.3.1 Alternative bracing**. Any bracing required by Section 2308.9.3 is permitted to be replaced by the following:

1. In one-story buildings, each panel shall have a length of not less than 2 feet 8 inches (813 mm) and a height of not more than 10 feet (3048 mm). Each panel shall be sheathed on one face with 3/8-inch-minimum-thickness (9.5 mm) wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with Table 2304.9.1 and blocked at wood structural panel edges. For structures assigned to Seismic Design Category D or E, each panel shall be sheathed on one face with 15/32-inch-minimum-thickness (11.9 mm) wood structural panel sheathing nailed with 8d common nails spaced 3 inches on panel edges, 3 inches at intermediate supports. Two anchor bolts installed in accordance with Section 2308.6 shall be provided in each panel. Anchor bolts shall be placed at each panel outside quarter points. Each panel end stud shall have a tie-down device fastened to the foundation, capable of providing an approved uplift capacity of not less than 1,800 pounds (8006 N). The tie-down device shall be installed in accordance with the manufacturer's recommendations. The panels shall be supported directly on a foundation or on floor framing supported directly on a foundation that is continuous across the entire length of the braced wall line. This foundation shall be reinforced with

not less than one No. 4 bar top and bottom.

Where the continuous foundation is required to have a depth greater than 12 inches (305 mm), a minimum 12-inch by 12-inch (305 mm by 305 mm) continuous footing or turned down slab edge is permitted at door openings in the braced wall line. This continuous footing or turned down slab edge shall be reinforced with not less than one No. 4 bar top and bottom. This reinforcement shall be lapped 15 inches (381 mm) with the reinforcement required in the continuous foundation located directly under the braced wall line.

2. In the first story of two-story buildings, each wall panel shall be braced in accordance with Section 2308.9.3.1, Item 1, except that the wood structural panel sheathing shall be provided on both faces, three anchor bolts shall be placed at one-quarter points, and tie-down device uplift capacity shall not be less than 3,000 pounds (13 344 N).

**2308.9.3.2 Alternate bracing wall panel adjacent to a door or window opening.** Any bracing required by Section 2308.9.3 is permitted to be replaced by the following when used adjacent to a door or window opening with a full-length header:

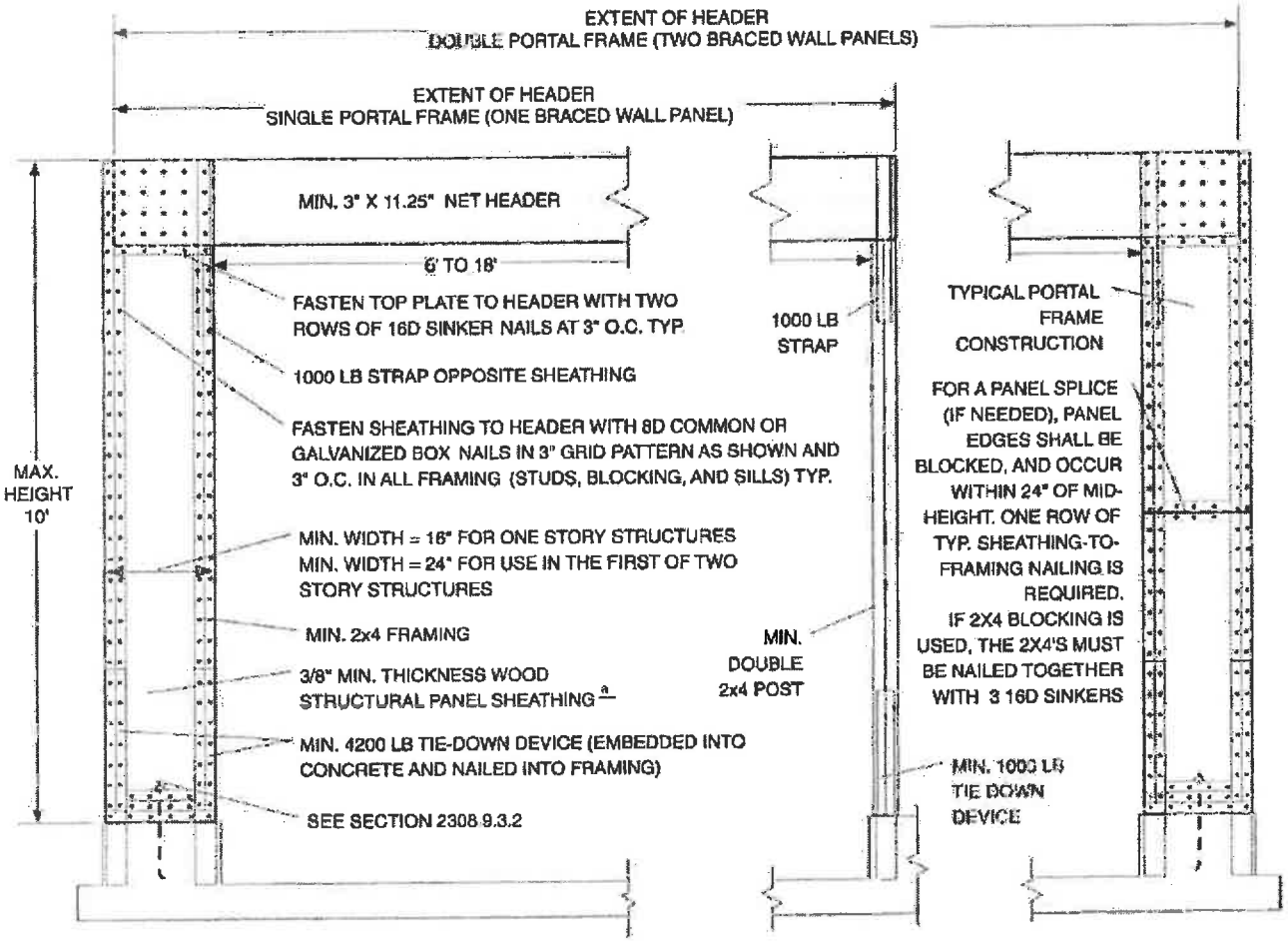
1. In one-story buildings, each panel shall have a length of not less than 16 inches (406 mm) and a height of not more than 10 feet (3048 mm). Each panel shall be sheathed on one face with a single layer of 3/8 inch (9.5 mm) minimum thickness wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with Figure 2308.9.3.2. For structures assigned to Seismic Design Category D or E, each panel shall be sheathed on one face with 15/32-inch-minimum-thickness (11.9 mm) wood structural panel sheathing nailed with 8d common nails spaced 3 inches on panel edges, 3 inches at intermediate supports and in accordance with Figure 2308.9.3.2. The wood structural panel sheathing shall extend up over the solid sawn or glued-laminated header and shall be nailed in accordance with Figure 2308.9.3.2. A built-up header consisting of at least two 2 × 12s and fastened in accordance with Item 24 of Table 2304.9.1 shall be permitted to be used. A spacer, if used, shall be placed on the side of the built-up beam opposite the wood structural panel sheathing. The header shall extend between the inside faces of the first full-length outer studs of each panel. The clear span of the header between the inner studs of each panel shall be not less than 6 feet (1829 mm) and not more than 18 feet (5486 mm) in length. A strap with an uplift capacity of not less than 1,000 pounds (4,400 N) shall fasten the header to the inner studs opposite the sheathing. One anchor bolt not less than 5/8 inch (15.9 mm) diameter and installed in accordance with Section 2308.6 shall be provided in the center of each sill plate. The studs at each end of the panel shall have a tie-down device fastened to the foundation with an uplift capacity of not less than 4,200 pounds (18 480 N).

Where a panel is located on one side of the opening, the header shall extend between the inside face of the first full-length stud of the panel and the bearing studs at the other end of the opening. A strap with an uplift capacity of not less than 1,000 pounds (4400 N) shall fasten the header to the bearing studs. The bearing studs shall also have a tie-down device fastened to the foundation with an uplift capacity of not less than 1,000 pounds (4400 N).

The tie-down devices shall be an embedded strap type, installed in accordance with the manufacturer's recommendations. The panels shall be supported directly on a foundation that is continuous across the entire length of the braced wall line. This foundation shall be reinforced with not less than one No. 4 bar top and bottom.

Where the continuous foundation is required to have a depth greater than 12 inches (305 mm), a minimum 12-inch by 12-inch (305 mm by 305 mm) continuous footing or turned down slab edge is permitted at door openings in the braced wall line. This continuous footing or turned down slab edge shall be reinforced with not less than one No. 4 bar top and bottom. This reinforcement shall be lapped not less than 15 inches (381 mm) with the reinforcement required in the continuous foundation located directly under the braced wall line.

2. In the first story of two-story buildings, each wall panel shall be braced in accordance with Item 1 above, except that each panel shall have a length of not less than 24 inches (610 mm).




For SI: 1 foot = 304.8 mm; 1 inch = 25.4 mm; 1 pound = 4.448 N.

a. For structures assigned to Seismic Design Category D or E, sheathed on one face with 15/32 inch minimum-thickness (11.9 mm) wood structural panel sheathing nailed with 8d common nails spaced 6 inches panel edges, 12 inches at intermediate supports.

FIGURE 2308.9.3.2
ALTERNATE BRACED WALL PANEL ADJACENT TO A DOOR OR WINDOW OPENING

**25.02.39: AMENDMENT OF TABLE 2308.12.4**: Notwithstanding the provisions of Section 25.02.01 of this Article, Table 2308.12.4 of the Building Code is amended to read as follows:

**TABLE 2308.12.4**
**WALL BRACING IN SEISMIC DESIGN CATEGORIES D AND E**
**(Minimum Percentage of Wall Bracing per each Braced Wall Line [a])**

| CONDITION | SHEATHING TYPEb | SDS < 0.50 | 0.50 ≤SDS < 0.75 | 0.75 ≤ SD S ≤ 1.00 | S DS > 1.00 |
|---|---|---|---|---|---|
| One Story | G-Pc | 43 | 59 | 75 | 100 |
| | S-Wd | 21 | 32 | 37 | 48 |

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

a. Minimum length of panel bracing of one face of the wall for S-W sheathing shall be at least 4'-0" long or both faces of the wall for G-P sheathing shall be at least 8'-0" long; h/w ratio shall not exceed 2:1. For S-W panel bracing of the same material on two faces of the wall, the minimum length is permitted to be one-half the tabulated value but the h/w ratio shall not exceed 2:1 and design for uplift is required. The 2:1 h/w ratio limitation does not apply to alternate braced wall panels constructed in accordance with Section 2308.9.3.1 or 2308.9.3.2. Wall framing to which sheathing used for bracing is applied shall be nominal 2 inch wide [actual 11/2 inch (38 mm)] or larger members and spaced a maximum of 16 inches on center. Braced wall panel construction types shall not be mixed within a braced wall line.

b. G-P = gypsum board, portland cement plaster or gypsum sheathing boards; S-W = wood structural panels;

c. Nailing as specified below shall occur at all panel edges at studs, at top and bottom plates and, where occurring, at blocking:
For 1/2-inch gypsum board, 5d (0.113 inch diameter) cooler nails at 7 inches on center;
For 5/8-inch gypsum board, No 11 gage (0.120 inch diameter) cooler nails at 7 inches on center;
For gypsum sheathing board, 1-3/4 inches long by 7/16-inch head, diamond point galvanized nails at 4 inches on center;
For gypsum lath, No. 13 gage (0.092 inch) by 1-1/8 inches long, 19/64-inch head, plasterboard at
5 inches on center;
For Portland cement plaster, No. 11 gage (0.120 inch) by 11/2 inches long, 7/16- inch head at 6 inches on center;

d. S-W sheathing shall be a minimum of 15/32" thick nailed with 8d common placed 3/8 inches from panel edges and spaced not more than 6 inches on center and 12 inches on center along intermediate framing members.

**25.02.40: AMENDMENT OF SECTION 2308.12.5**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 2308.12.5 of the Building Code is amended to read as follows:

**2308.12.5 Attachment of sheathing.** Fastening of braced wall panel sheathing shall not be less than that prescribed in Table 2308.12.4 or 2304.9.1. Wall sheathing shall not be attached to framing members by adhesives. Staple fasteners in Table 2304.9.1 shall not be used to resist or transfer seismic forces in structures assigned to Seismic Design Category D, E or F.

**Exception**: Staples may be used to resist or transfer seismic forces when the allowable shear values are substantiated by cyclic testing and approved by the building official.

All braced wall panels shall extend to the roof sheathing and shall be attached to parallel

roof rafters or blocking above with framing clips (18 gauge minimum) spaced at maximum 24 inches (6096 mm) on center with four 8d nails per leg (total eight 8d nails per clip). Braced wall panels shall be laterally braced at each top corner and at maximum 24 inches (6096 mm) intervals along the top plate of discontinuous vertical framing.

**25.02.41: AMENDMENT OF SECTION 3109.4.1 AND ADDITION OF SECTION 3109.4.1.7.1**: Notwithstanding the provisions of Section 25.02.01 of this Article, Section 3109.4.1 of the Building Code is amended as follows:

**3109.4.1 Barrier Height and Clearances.** The top of the barrier shall be at least 60 inches not to exceed 72 inches above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance at the bottom of the barrier may be increased to 4 inches (102 mm) when grade is a solid surface such as a concrete deck, or when the barrier is mounted on the top of the aboveground pool structure. When barriers have horizontal members spaced less than 45 inches (1,143 mm) apart, the horizontal members shall be placed on the poolside of the barrier. Any decorative design work on the side away from the swimming pool, such as protrusions, indentations or cutouts, which render the barrier easily climbable, is prohibited.

Section 3109.4.1.7.1 is added to the Building Code to read as follows:

**3109.4.1.7.1 Driveway Gates.** Driveway gates serving as part of the required pool barrier shall comply with the following:

1. Driveway gates, if operated manually, shall have a spring-loaded, self-closing, self-latching mechanism installed in accordance with the same procedure required in the City Building Code for pedestrian gates.

2. Driveway gates may be equipped with an electric gate-operating device provided that it is approved by a recognized Electrical Testing Agency.

3. Electric gate-operating devices shall be provided with a safety mechanism to interrupt and recycle the device, should the gate become blocked.

4. Electric gate-operating devices shall be provided with a time delay closing device, which is set and maintained to activate a maximum of 30 seconds after the gate has been opened.

**SECTION 3**. New Article 03 Residential Code is hereby added to Chapter 25 of the San Marino City Code to read as follows:

## RESIDENTIAL CODE

**SECTION:**



**25.03.01: RESIDENTIAL CODE ADOPTED**: Except as hereinafter provided, the California Residential Code, 2013 Edition, based on the 2012 International Residential Code as published by the International Code Council, including all appendices, is hereby adopted by reference and incorporated herein as though fully set forth herein and shall constitute the Residential Code of the City. A copy of such Code shall be located in the Planning and Building Department and shall be, at all times, maintained for use and examination by the public. For the purposes of this Code, the Building Official shall be the Building Official.

**25.03.02: AMENDMENT OF SECTION R112.1**: Notwithstanding the provisions of Section 25.03.01 of this Article, Section R112 of the Residential Code is hereby amended to read as follows:

**R112.1 General.** In order to hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretation of the Residential Code, there shall be and is hereby created a Board of Appeals consisting of the members of the City Council. The Planning and Building Director shall be an ex officio member of and shall act as Secretary to said Board but shall have no vote on any matter before the Board. The Board shall adopt rules of procedures for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the Building Official.

The Board may request the services of members of the community who are qualified by experience and training to interpret matters pertaining to the Residential Code to act as technical assistants to the Board. Technical assistants shall have no vote on any matter before the Board.

**25.03.03: AMENDMENT OF SECTION R113.1.** Notwithstanding the provisions of Section 25.03.01 of this Article, Section R113.1 of the Residential Code is amended to read as follows:

**R113.1 Unlawful acts.** It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert, demolish, equip, use, occupy, or maintain any building, structure or equipment or cause or permit the same to be done in violation of the Residential Code.

It is hereby declared that any violation of the Residential Code constitutes a public nuisance, and in addition to any other remedies provided by the Residential Code for its enforcement, the City Council may bring civil suit to enjoin the violation of any provisions of this Residential Code.

Any person, firm or corporation violating any of the provisions of the Residential Code shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punishable as provided in Section 01.04.03A of this Code. Each separate day or any portion thereof during which violation of the Residential Code occurs or continues shall be deemed to constitute a separate offense, and upon conviction thereof shall be punishable as herein provided.

**25.03.04: AMENDMENT OF SECTIONS R108.2 AND R108.5**: Notwithstanding the provisions of Section 25.03.01 of this Article, Sections R108.2 and R108.5 of the Residential Code are amended to read as follows:

**R108.2 Schedule of permit fees.** The fee for each permit shall be as periodically established by City Council resolution.

**R108.2.1 Plan review fees.** When plans or other data are required pursuant to Section R106, a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be one-hundred percent (100%) of the building permit fee established by resolution of the City Council.

**R108.2.2 Expiration of plan review.** Applications for which no permit is issued within 180 days following the date the application or the date of final approval, if one exists, shall expire by limitation, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the Building Official. The Building Official may extend the time for action by the applicant for a period not exceeding 180 days on written request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee.

**R108.2.3 Expiration of building permits.** Building permit expiration dates are based on project valuation according to the following schedule:

| VALUATION | PERMIT EXPIRATION DATE |
|---|---|

| | |
|---|---|
| Up to $50,000 | 6 months |
| $50,000 - $100,000 | 9 months |
| $100,001 - $250,000 | 12 months |
| $250,001 and over | 15 months |

The Building Official may extend the permit expiration date for a period not exceeding 180 days on written request (submitted prior to the expiration date) by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once.

If an applicant wishes to renew a permit that has been expired for less than 6 months, 50% of the original fees paid shall be required to renew the permit. If an applicant wishes to renew a permit that has been expired for more than 6 months, 100% of the original fees paid shall be required to renew the permit.

**R108.5 Fee refunds.** The Building Official may authorize refunding of any fee paid hereunder that was erroneously paid or collected.

The Building Official may authorize the refunding of not more than 80% of the permit fee paid when no work has been done under a permit in accordance with the Residential Code.

The Building Official shall not authorize refunding of any fee paid except on written application filed by the original permittee within 60 days of the date of fee payment.

**25.03.05: ADDITION OF SECTIONS R109.1.4.1, R109.1.5.3, AND R109.1.6.1:** Notwithstanding the provisions of Section 25.03.01 of this Article, new Sections R109.1.4.1, R109.1.5.3, and R109.1.6.1are added to the Residential Code to read as follows:

**R109.1.4.1** Prior to frame approval, a rough zoning inspection is required in order to ensure compliance with the approved Development Plans.

**R109.1.5.3** Prior to final approval, a final zoning inspection by Planning Department staff is required in order to ensure final compliance with approved Development Plans.

**R109.1.6.1 Connections prohibited.** Unless approval has been first obtained from the Building Official, the connection of gas or electrical utilities shall be prohibited until the final building, heating, air conditioning, electrical, plumbing and grading inspections, as required, are completed and approval has been granted on any building.

**25.03.06: AMENDMENT OF TABLE 301.2.2.1.1 AND SECTION R301.2.2.1.1:** Notwithstanding the provisions of Section 25.03.01 of this Article, Table R301.2.2.1.1 and Section R301.2.2.1.2 of the 2013 Edition of the California Residential Code are amended to read as follows:

**TABLE R301.2.2.1.1**
**SEISMIC DESIGN CATEGORY DETERMINATION**

| CALCULATED SDS | SEISMIC DESIGN CATEGORY |
|---|---|
| SDS ≤ 0.17g | A |
| 0.17g < SDS ≤ 0.33g | B |
| 0.33g < SDS ≤ 0.50g | C |
| 0.50g < SDS ≤ 0.67g | $D_0$ |
| 0.67g < SDS ≤ 0.83g | $D_1$ |
| 0.83g < SDS ≤ 1.00g | $D_2$ |
| 1.00g < SDS | E |

**R301.2.2.1.2 Alternative determination of Seismic Design Category E.** Buildings located in Seismic Design Category E in accordance with Figure R301.2(2) are permitted to be reclassified as being in Seismic Design Category D2 provided one of the following is done:

1. A more detailed evaluation of the seismic design category is made in accordance with the provisions and maps of the California Building Code. Buildings located in Seismic Design Category E per Table R301.2.2.1.1, but located in Seismic Design Category D per the California Building Code, may be designed using the Seismic Design Category D2 requirements of this code.

2. Buildings located in Seismic Design Category E that conform to the following additional restrictions are permitted to be constructed in accordance with the provisions for Seismic Design Category D2 of this code:

    2.1. All exterior shear wall lines or braced wall panels are in one plane vertically from the foundation to the uppermost story.

    2.2. Floors shall not cantilever past the exterior walls.

    2.3. The building is within all of the requirements of Section R301.2.2.2.5 for being considered as regular.

    2.4. For buildings over one story in height, the calculated $S_{DS}$ shall not exceed 1.25g.

**25.03.07: AMENDMENT OF SECTION R301.2.2.2.5:** Notwithstanding the provisions of Section 25.03.01 of this Article, Items 1, 3 and 5 of Section R301.2.2.2.5 of the 2013 Edition of the California Residential Code are amended to read as follows:

1. When exterior shear wall lines or braced wall panels are not in one plane vertically from the foundation to the uppermost story in which they are required.

3. When the end of a braced wall panel occurs over an opening in the wall

5. When portions of a floor level are vertically offset.

**25.03.08: ADDITION OF SECTION R301.2.2.3.8:** Notwithstanding the provisions of Section 25.03.01 of this Article, Section R301.2.2.3.8 is added to the Residential Code to read as follows:

**R301.2.2.3.8 Anchorage of Mechanical, Electrical, or Plumbing Components and Equipment.** Mechanical, electrical, or plumbing components and equipment shall be anchored to the structure. Anchorage of the components and equipment shall be designed to resist loads in accordance with the International Building Code and ASCE 7, except where the component is positively attached to the structure and flexible connections are provided between the component and associated ductwork, piping, and conduit; and either

1. The component weighs 400 lb (1,780 N) or less and has a center of mass located 4 ft (1.22 m) or less above the supporting structure; or

2. The component weighs 20 lb (89N) or less or, in the case of a distributed system, 5 lb/ft (73 N/m) or less.

**25.03.09: AMENDMENT OF SECTION R401.1:** Notwithstanding the provisions of Section 25.03.01 of this Article, Section R401.1 of the Residential Code is amended to read as follows:

**R401.1 Application.** The provisions of this chapter shall control the design and construction of the foundation and foundation spaces for all buildings. In addition to the provisions of this chapter, the design and construction of foundations in areas prone to flooding as established by Table R301.2(1) shall meet the provisions of Section R322. Wood foundations shall be designed and installed in accordance with AF&PA PWF.

Exception: The provisions of this chapter shall be permitted to be used for wood foundations only in the following situations:

1. In buildings that have no more than two floors and a roof.

2. When interior basement and foundation walls are constructed at intervals not exceeding 50 feet (15 240 mm).

Wood foundations in Seismic Design Category D0, D1 or D2 shall not be permitted.

Exception: In non-occupied, single-story, detached storage sheds and similar uses other than carport or garage, provided the gross floor area does not exceed 200 square feet, the plate height does not exceed 12 feet in height above the grade plane at any point, and the maximum roof projection does not exceed 24 inches.

**25.03.10: AMENDMENT OF SECTIONS R403.1.2, R403.1.3 AND R403.1.5:**

Notwithstanding the provisions of Section 25.03.01 of this Article, Sections R403.1.2, R403.1.3 and R403.1.5 of the Residential Code are amended to read as follows:

**R403.1.2 Continuous footing in Seismic Design Categories $D_0$, $D_1$ and $D_2$.** The braced wall panels at exterior walls of buildings located in Seismic Design Categories D0, D1 and D2 shall be supported by continuous footings. All required interior braced wall panels in buildings shall be supported by continuous footings.

**R403.1.3 Seismic reinforcing.** Concrete footings located in Seismic Design Categories D0, D1 and D2, as established in Table R301.2(1), shall have minimum reinforcement. Bottom reinforcement shall be located a minimum of 3 inches (76 mm) clear from the bottom of the footing.

In Seismic Design Categories D0, D1 and D2 where construction joint is created between a concrete footing and a stem wall, a minimum of one No. 4 bar shall be installed at not more than 4 feet (1219 mm) on center. The vertical bar shall extend to 3 inches (76 mm) clear of the bottom of the footing, have a standard hook and extend a minimum of 14 inches (357 mm) into the stem wall.

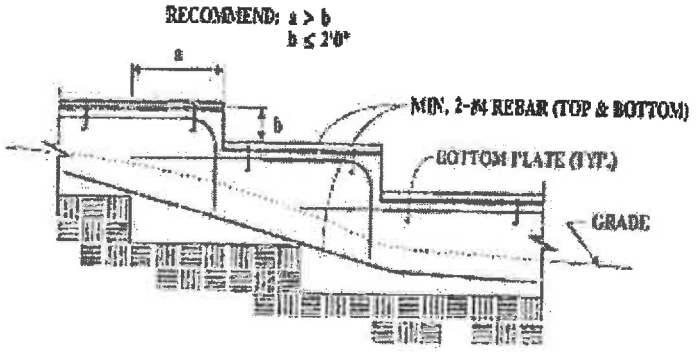
In Seismic Design Categories D0, D1 and D2 where a grouted masonry stem wall is supported on a concrete footing and stem wall, a minimum of one No. 4 bar shall be installed at not more than 4 feet (1219 mm) on center. The vertical bar shall extend to 3 inches (76 mm) clear of the bottom of the footing and have a standard hook.

In Seismic Design Categories D0, D1 and D2 masonry stem walls without solid grout and vertical reinforcing are not permitted.

> **Exception**: In detached one- and two-family dwellings located in Seismic Design Category A, B or C which are three stories or less in height and constructed with stud bearing walls, isolated plain concrete footings, supporting columns or pedestals are permitted.

**R403.1.5 Slope.** The top surface of footings shall be level. The bottom surface of footings shall be permitted to have a slope not exceeding one unit vertical in 10 units horizontal (10-percent slope). Footings shall be stepped where it is necessary to change the elevation of the top surface of the footing or where the surface of the ground slopes more than one unit vertical in 10 units horizontal (10-percent slope).

For structures located in Seismic Design Categories D0, D1 or D2, stepped footings shall be reinforced with four No. 4 rebar. Two bars shall be place at the top and bottom of the footings as shown in Figure R403.1.5.




STEPPED FOUNDATIONS

**FIGURE R403.1.5**
**STEPPED FOOTING**

**25.03.11: AMENDMENT OF SECTION R404.02:** Notwithstanding the provisions of Section 25.03.01 of this Article, Section R404.2 of the Residential Code is amended to read as follows:

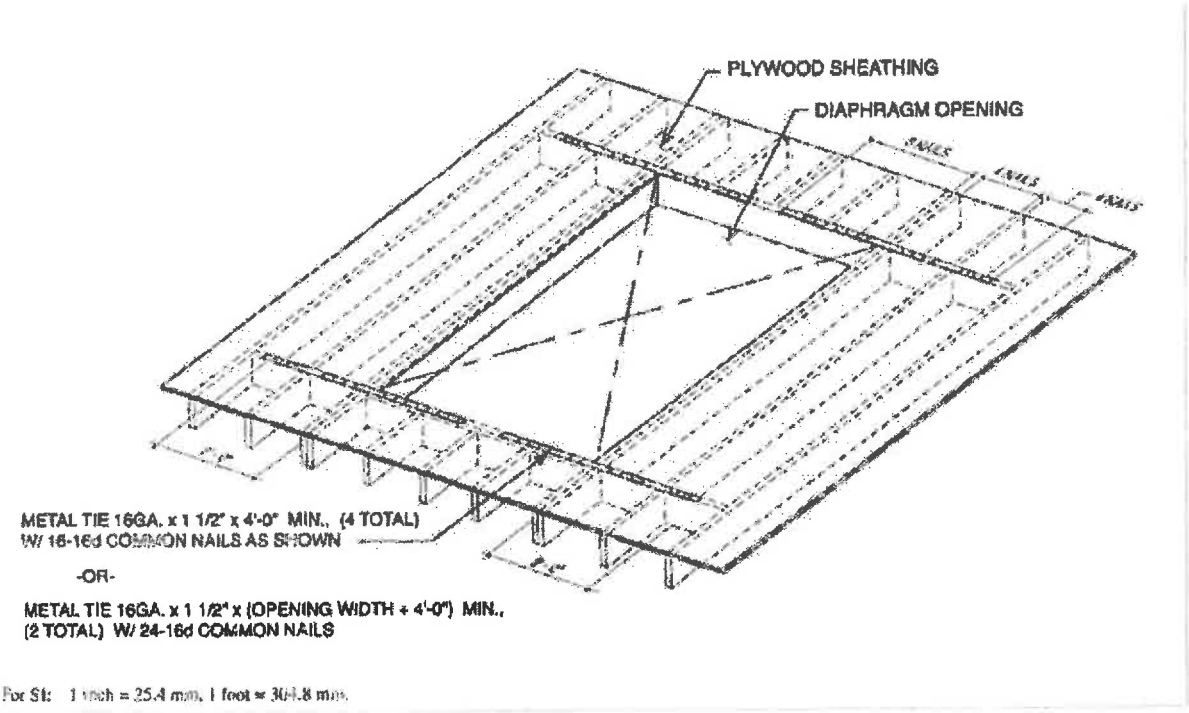
**R404.2 Wood foundation walls.** Wood foundation walls shall be constructed in accordance with the provisions of Sections R404.2.1 through R404.2.6 and with the details shown in Figures R403.1(2) and R403.1(3). Wood foundation walls shall not be used for structures located in Seismic Design Category $D_0$, $D_1$ or $D_2$.

**25.03.12: AMENDMENT OF SECTION R501.1:** Notwithstanding the provisions of Section 25.03.01 of this Article, Section R501.1 of the Residential Code is amended to read as follows:

**R501.1 Application.** The provisions of this chapter shall control the design and construction of the floors for all buildings including the floors of attic spaces used to house mechanical or plumbing fixtures and equipment. Mechanical or plumbing fixtures and equipment shall be attached (or anchored) to the structure in accordance with Section R301.2.2.3.8

**25.03.13: ADDITION OF SECTION R503.2.4**: Notwithstanding the provisions of Section 25.03.01 of this Article, Section R503.2.4 is added to the Residential Code to read as follows:

**R503.2.4 Openings in horizontal diaphragms.** Openings in horizontal diaphragms with a dimension perpendicular to the joist that is greater than 4 feet (1.2 m) shall be constructed in accordance with Figure R503.2.4.




For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

a. Blockings shall be provided beyond headers.
b. Metal ties not less than 0.058 inch [1.47 mm (16 galvanized gage)] by 1.5 inches (38 mm) wide with eight 16d common nails on each side of the header-joist intersection. The metal ties shall have a minimum yield of 33,000 psi (227 MPa).
c. Openings in diaphragms shall be further limited in accordance with Section R301.2.2.2.5.

FIGURE R503.2.4
OPENINGS IN HORIZONTAL DIAPHRAGMS

**25.03.14: AMENDMENT OF TABLE R602.3(1):** Notwithstanding the provisions of Section 25.03.01 of this Article, Lines 37 and 38 of Table R602.3(1) of the Residential Code are amended to read as follows:

TABLE R602.3(1)—continued
FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

| ITEM | DESCRIPTION OF BUILDING MATERIALS | DESCRIPTION OF FASTENER[b, c, e] | SPACING OF FASTENERS | |
|---|---|---|---|---|
| | | | Edges (inches)[f] | Intermediate supports[c, e] (inches) |
| | Wood structural panels, subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing | | | |
| 32 | 3/8" - 1/2" | 6d common (2" × 0.113") nail (subfloor wall)[g]<br>8d common (2 1/2" × 0.131") nail (roof)[g] | 6 | 12[g] |
| 33 | 19/32" - 1" | 8d common nail (2 1/2" × 0.131") | 6 | 12[g] |
| 34 | 1 1/8" - 1 1/4" | 10d common (3" × 0.148") nail or<br>8d (2 1/2" × 0.131") deformed nail | 6 | 12 |
| | Other wall sheathing[h] | | | |
| 35 | 1/2" structural cellulosic fiberboard sheathing | 1 1/2" galvanized roofing nail, 7/16" crown or 1" crown staple 16 ga., 1 1/4" long | 3 | 6 |
| 36 | 25/32" structural cellulosic fiberboard sheathing | 1 1/4" galvanized roofing nail, 7/16" crown or 1" crown staple 16 ga., 1 1/2" long | 3 | 6 |
| 37[d,k] | 1/2" gypsum sheathing[d] | 1 1/2" galvanized roofing nail; staple galvanized, 1 1/2" long; 1 1/4 screws, Type W or S | 7 | 7 |
| 38[d,k] | 5/8" gypsum sheathing[d] | 1 7/8" galvanized roofing nail; staple galvanized, 1 7/8" long; 1 5/8" screws, Type W or S | 7 | 7 |
| | Wood structural panels, combination subfloor underlayment to framing | | | |
| 39 | 3/4" and less | 6d deformed (2" × 0.120") nail or<br>8d common (2 1/2" × 0.131") nail | 6 | 12 |
| 40 | 7/8" - 1" | 8d common (2 1/2" × 0.131") nail or<br>8d deformed (2 1/2" × 0.120") nail | 6 | 12 |
| 41 | 1 1/8" - 1 1/4" | 10d common (3" × 0.148") nail or<br>8d deformed (2 1/2" × 0.120") nail | 6 | 12 |

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s; 1 Ksi = 6.895 MPa.

a. All nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as shown: 80 ksi for shank diameter of 0.192 inch (20d common nail), 90 ksi for shank diameters larger than 0.142 inch but not larger than 0.177 inch, and 100 ksi for shank diameters of 0.142 inch or less.

b. Staples are 16 gage wire and have a minimum 7/16-inch on diameter crown width.

c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.

d. Four-foot by 8-foot or 4-foot by 9-foot panels shall be applied vertically.

e. Spacing of fasteners not included in this table shall be based on Table R602.3(2).

f. For regions having basic wind speed of 110 mph or greater, 8d deformed (2 1/2" × 0.120) nails shall be used for attaching plywood and wood structural panel roof sheathing to framing within minimum 48-inch distance from gable end walls, if mean roof height is more than 25 feet, up to 35 feet maximum.

g. For regions having basic wind speed of 100 mph or less, nails for attaching wood structural panel roof sheathing to gable end wall framing shall be spaced 6 inches on center. When basic wind speed is greater than 100 mph, nails for attaching panel roof sheathing to intermediate supports shall be spaced 6 inches on center for minimum 48-inch distance from edges, eaves and gable end walls; and 4 inches on center to gable end wall framing.

h. Gypsum sheathing shall conform to ASTM C 1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C 208.

i. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking and at all floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking.

j. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule, provide two toe nails on one side of the rafter and toe nails from the ceiling joist to top plate in accordance with this schedule. The toe nail on the opposite side of the rafter shall not be required.

K. Use of staples in braced wall panels shall be prohibited in Seismic Design Category D0, D1, or D2.

**25.03.15: AMENDMENT OF TABLE R602.3(2):** Notwithstanding the provisions of Section 25.03.01 of this Article, Footnote "b" of Table R602.3(2) of the Residential Code is amended to read as follows:

b. Staples shall have a minimum crown width of 7/16-inch on diameter except as noted. Use of staples in roof, floor, subfloor, and braced wall panels shall be prohibited in Seismic Design Category $D_0$, $D_1$, or $D_2$.

**25.03.16: AMENDMENT OF TABLE R602.10.3(3):** Notwithstanding the provisions of Section 25.03.01 of this Article, Table R602.10.3(3) of the Residential Code is amended to read as follows:

**TABLE R602.10.3(3)**
**BRACING REQUIREMENTS BASED ON SEISMIC DESIGN CATEGORY**

| • SOIL CLASS D[b]<br>• WALL HEIGHT = 10 FEET<br>• 10 PSF FLOOR DEAD LOAD<br>• 15 PSF ROOF/CEILING DEAD LOAD<br>• BRACED WALL LINE SPACING ≤ 25 FEET | | | MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE[a] | | | | |
|---|---|---|---|---|---|---|---|
| Seismic Design Category | Story Location | Braced Wall Line Length (feet) | Method LIB[c] | Method GB[c] | Methods DWB, SFB, PBS, PCP, HPS, CS-SFB[c,e] | Method WSP | Methods CS-WSP, CS-G |
| C (townhouses only) |  | 10 | 2.5 | 2.5 | 2.5 | 1.6 | 1.4 |
| | | 20 | 5.0 | 5.0 | 5.0 | 3.2 | 2.7 |
| | | 30 | 7.5 | 7.5 | 7.5 | 4.8 | 4.1 |
| | | 40 | 10.0 | 10.0 | 10.0 | 6.4 | 5.4 |
| | | 50 | 12.5 | 12.5 | 12.5 | 8.0 | 6.8 |
| |  | 10 | NP | 4.5 | 4.5 | 3.0 | 2.6 |
| | | 20 | NP | 9.0 | 9.0 | 6.0 | 5.1 |
| | | 30 | NP | 13.5 | 13.5 | 9.0 | 7.7 |
| | | 40 | NP | 18.0 | 18.0 | 12.0 | 10.2 |
| | | 50 | NP | 22.5 | 22.5 | 15.0 | 12.8 |
| |  | 10 | NP | 6.0 | 6.0 | 4.5 | 3.8 |
| | | 20 | NP | 12.0 | 12.0 | 9.0 | 7.7 |
| | | 30 | NP | 18.0 | 18.0 | 13.5 | 11.5 |
| | | 40 | NP | 24.0 | 24.0 | 18.0 | 15.3 |
| | | 50 | NP | 30.0 | 30.0 | 22.5 | 19.1 |
| $D_0$ |  | 10 | NP | ~~2.8~~ 5.6 | ~~2.8~~ 5.6 | 1.8 | 1.6 |
| | | 20 | NP | ~~5.5~~ 11.0 | ~~5.5~~ 11.0 | 3.6 | 3.1 |
| | | 30 | NP | ~~8.3~~ 16.6 | ~~8.3~~ 16.6 | 5.4 | 4.6 |
| | | 40 | NP | ~~11.0~~ 22.0 | ~~11.0~~ 22.0 | 7.2 | 6.1 |
| | | 50 | NP | ~~13.8~~ 27.6 | ~~13.8~~ 27.6 | 9.0 | 7.7 |
| |  | 10 | NP | ~~5.3~~ NP | ~~5.3~~ NP | 3.8 | 3.2 |
| | | 20 | NP | ~~10.5~~ NP | ~~10.5~~ NP | 7.5 | 6.4 |
| | | 30 | NP | ~~15.8~~ NP | ~~15.8~~ NP | 11.3 | 9.6 |
| | | 40 | NP | ~~21.0~~ NP | ~~21.0~~ NP | 15.0 | 12.8 |
| | | 50 | NP | ~~26.3~~ NP | ~~26.3~~ NP | 18.8 | 16.0 |
| |  | 10 | NP | ~~7.3~~ NP | ~~7.3~~ NP | 5.3 | 4.5 |
| | | 20 | NP | ~~14.5~~ NP | ~~14.5~~ NP | 10.5 | 9.0 |
| | | 30 | NP | ~~21.8~~ NP | ~~21.8~~ NP | 15.8 | 13.4 |
| | | 40 | NP | ~~29.0~~ NP | ~~29.0~~ NP | 21.0 | 17.9 |
| | | 50 | NP | ~~36.3~~ NP | ~~36.3~~ NP | 26.3 | 22.3 |

*(continued)*

**TABLE R602.10.3(3)—continued**
**BRACING REQUIREMENTS BASED ON SEISMIC DESIGN CATEGORY**

| • SOIL CLASS D[a]<br>• WALL HEIGHT = 10 FEET<br>• 10 PSF FLOOR DEAD LOAD<br>• 15 PSF ROOF/CEILING DEAD LOAD<br>• BRACED WALL LINE SPACING ≤ 25 FEET | | | MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE[a] | | | | |
|---|---|---|---|---|---|---|---|
| Seismic Design Category | Story Location | Braced Wall Line Length (feet) | Method LIB[c] | Method GB[d] | Methods DWB, SFB, PBS, PCP, HPS, CS-SFB[c,e] | Method WSP | Methods CS-WSP, CS-G |
| $D_1$ |  | 10 | NP | ~~3.0~~ 6.0 | ~~3.0~~ 6.0 | 2.0 | 1.7 |
| | | 20 | NP | ~~6.0~~ 12.0 | ~~6.0~~ 12.0 | 4.0 | 3.4 |
| | | 30 | NP | ~~9.0~~ 18.0 | ~~9.0~~ 18.0 | 6.0 | 5.1 |
| | | 40 | NP | ~~12.0~~ 24.0 | ~~12.0~~ 24.0 | 8.0 | 6.8 |
| | | 50 | NP | ~~15.0~~ 30.0 | ~~15.0~~ 30.0 | 10.0 | 8.5 |
| |  | 10 | NP | ~~6.0~~ NP | ~~6.0~~ NP | 4.5 | 3.8 |
| | | 20 | NP | ~~12.0~~ NP | ~~12.0~~ NP | 9.0 | 7.7 |
| | | 30 | NP | ~~18.0~~ NP | ~~18.0~~ NP | 13.5 | 11.5 |
| | | 40 | NP | ~~24.0~~ NP | ~~24.0~~ NP | 18.0 | 15.3 |
| | | 50 | NP | ~~30.0~~ NP | ~~30.0~~ NP | 22.5 | 19.1 |
| |  | 10 | NP | ~~8.5~~ NP | ~~8.5~~ NP | 6.0 | 5.1 |
| | | 20 | NP | ~~17.0~~ NP | ~~17.0~~ NP | 12.0 | 10.2 |
| | | 30 | NP | ~~25.5~~ NP | ~~25.5~~ NP | 18.0 | 15.3 |
| | | 40 | NP | ~~34.0~~ NP | ~~34.0~~ NP | 24.0 | 20.4 |
| | | 50 | NP | ~~42.5~~ NP | ~~42.5~~ NP | 30.0 | 25.5 |
| $D_2$ |  | 10 | NP | ~~4.0~~ 8.0 | ~~4.0~~ 8.0 | 2.5 | 2.1 |
| | | 20 | NP | ~~8.0~~ 16.0 | ~~8.0~~ 16.0 | 5.0 | 4.3 |
| | | 30 | NP | ~~12.0~~ 24.0 | ~~12.0~~ 24.0 | 7.5 | 6.4 |
| | | 40 | NP | ~~16.0~~ 32.0 | ~~16.0~~ 32.0 | 10.0 | 8.5 |
| | | 50 | NP | ~~20.0~~ 40.0 | ~~20.0~~ 40.0 | 12.5 | 10.6 |
| |  | 10 | NP | ~~7.5~~ NP | ~~7.5~~ NP | 5.5 | 4.7 |
| | | 20 | NP | ~~15.0~~ NP | ~~15.0~~ NP | 11.0 | 9.4 |
| | | 30 | NP | ~~22.5~~ NP | ~~22.5~~ NP | 16.5 | 14.0 |
| | | 40 | NP | ~~30.0~~ NP | ~~30.0~~ NP | 22.0 | 18.7 |
| | | 50 | NP | ~~37.5~~ NP | ~~37.5~~ NP | 27.5 | 23.4 |
| |  | 10 | NP | NP | NP | NP | NP |
| | | 20 | NP | NP | NP | NP | NP |
| | | 30 | NP | NP | NP | NP | NP |
| | | 40 | NP | NP | NP | NP | NP |
| | | 50 | NP | NP | NP | NP | NP |
| | Cripple wall below one- or two-story dwelling | 10 | NP | NP | NP | 2.5 | 6.4 |
| | | 20 | NP | NP | NP | 15.0 | 12.8 |
| | | 30 | NP | NP | NP | 22.5 | 19.1 |
| | | 40 | NP | NP | NP | 30.0 | 25.5 |
| | | 50 | NP | NP | NP | 37.5 | 31.9 |

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 pound per square foot = 0.0479 kPa.

a. Linear interpolation shall be permitted.

b. Wall bracing lengths are based on a soil site class "D." Interpolation of bracing length between the $S_{ds}$ values associated with the Seismic Design Categories shall be permitted when a site-specific $S_{ds}$ value is determined in accordance with Section 1613.3 of the *International Building Code*.

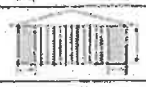
c. Method LIB shall have gypsum board fastened to at least one side with nails or screws per Table R602.3(1) for exterior sheathing or Table R702.3.5 for interior gypsum board. Spacing of fasteners at panel edges shall not exceed 8 inches.

d. Method CS-SFB applies in SDC C only.

e. Methods GB and PCP bracing wall panel h/w ratio shall not exceed 1:1 in SDC D0, D1 or D2. Methods DWB, SFB, PBS, and HPS are not permitted in SDC D0, D1, or D2.

**25.03.17: AMENDMENT OF TABLE R602.10.4:** Notwithstanding the provisions of Section 25.03.01 of this Article, Table R602.10.4 of the Residential Code is amended to read as follows:

**TABLE R602.10.4**
**BRACING METHODS** [1]

| METHODS, MATERIAL | | MINIMUM THICKNESS | FIGURE | CONNECTION CRITERIA[a] | |
|---|---|---|---|---|---|
| | | | | Fasteners | Spacing |
| Intermittent Bracing Method | LIB<br>Let-in-bracing | 1 × 4 wood or approved metal straps at 45° to 60° angles for maximum 16" stud spacing |  | Wood: 2-8d common nails or 3-8d ($2^1/_2$" long x 0.113" dia.) nails | Wood: per stud and top and bottom plates |
| | | | | Metal strap: per manufacturer | Metal: per manufacturer |
| | DWB<br>Diagonal wood boards | $^3/_4$" (1" nominal) for maximum 24" stud spacing |  | 2-8d ($2^1/_2$" long × 0.113" dia.) nails or 2 - $1^3/_4$" long staples | Per stud |
| | WSP<br>Wood structural panel (See Section R604) | ~~$^7/_{16}$"~~<br>15/32" | 8d common (2 1/2"x0.131) nails 3/8" edge distance to panel edge ~~Exterior sheathing per Table R602.3(3)~~<br>8d common (2 1/2"x0.131) nails 3/8" edge distance to panel edge ~~Interior sheathing per Table R602.3(1) or R602.3(2)~~ | | 6" edges 12" field<br>~~Varies by fastener 6" edges 12" field~~ |
| | BV-WSP[d]<br>Wood Structural Panels with Stone or Masonry Veneer (See Section R602.10.6.5) | $^7/_{16}$" | See Figure R602.10.6.5 | 8d common ($2^1/_2$" × 0.131) nails | 6" at panel edges 12" at intermediate supports 4" at braced wall panel end posts |
| | SFB<br>Structural fiberboard sheathing | $^1/_2$" or $^{25}/_{32}$" for maximum 16" stud spacing |  | $1^1/_2$" long × 0.12" dia. (for $^1/_2$" thick sheathing) $1^3/_4$" long × 0.12" dia. (for $^{25}/_{32}$" thick sheathing) galvanized roofing nails or 8d common ($2^1/_2$" long × 0.131" dia.) nails | 3" edges 6" field |
| | GB<br>Gypsum board | $^1/_2$" |  | Nails or screws per Table R602.3(1) for exterior locations<br>Nails or screws per Table R702.3.5 for interior locations | For all braced wall panel locations: 7" edges (including top and bottom plates) 7" field |
| | PBS<br>Particleboard sheathing (See Section R605) | $^1/_2$" or $^5/_8$" for maximum 16" stud spacing |  | For $^1/_2$", 6d common (2" long × 0.113" dia.) nails For $^5/_8$", 8d common ($2^1/_2$" long × 0.131" dia.) nails | 3" edges 6" field |
| | PCP<br>Portland cement plaster | See Section R703.6 for maximum 16" stud spacing |  | $1^1/_2$" long, 11 gage, $^7/_{16}$" dia. head nails or $^7/_8$" long, 16 gage staples [g] | 6" o.c. on all framing members |
| | HPS<br>Hardboard panel siding | $^7/_{16}$" for maximum 16" stud spacing |  | 0.092" dia., 0.225" dia. head nails with length to accommodate $1^1/_2$" penetration into studs | 4" edges 8" field |
| | ABW<br>Alternate braced wall | $^3/_8$" |  | See Section R602.10.6.1 | See Section R602.10.6.1 |

*(continued)*

**TABLE R602.10.4—continued**
**BRACING METHODS [f]**

| | METHODS, MATERIAL | MINIMUM THICKNESS | FIGURE | CONNECTION CRITERIA[a] | |
|---|---|---|---|---|---|
| | | | | Fasteners | Spacing |
| Intermittent Bracing Methods | **PFH** Portal frame with hold-downs | 3/8" |  | See Section R602.10.6.2 | See Section R602.10.6.2 |
| | **PFG** Portal frame at garage | 7/16" |  | See Section R602.10.6.3 | See Section R602.10.6.3 |
| Continuous Sheathing Methods | **CS-WSP** Continuously sheathed wood structural panel | ~~3/8"~~ 15/32" | ~~8d common (2 1/2"×0.131") nails spaced 6" edge distance to panel edge~~ 8d common (2 1/2"×0.131") nails spaced 6" edge distance to panel edge | ~~Exterior sheathing per Table R602.3(3)~~ ~~Interior sheathing per Table R602.3(4) or R602.3(3)~~ | 6" edges 12" field ~~Varies by fastener~~ 6" edges 12" field |
| | **CS-G**[b] Continuously sheathed wood structural panel adjacent to garage openings | ~~3/8"~~ 15/32" |  | See Method CS-WSP | See Method CS-WSP |
| | **CS-PF** Continuously sheathed portal frame | ~~3/4"~~ 15/32" |  | See Section R602.10.6.4 | See Section R602.10.6.4 |
| | **CS-SFB**[d] Continuously sheathed structural fiberboard | 1/2" or 25/32" for maximum 16" stud spacing |  | 1 1/2" long × 0.12" dia. (for 1/2" thick sheathing) 1 3/4" long × 0.12" dia. (for 25/32" thick sheathing) galvanized roofing nails or 8d common (2 1/2" long × 0.131" dia.) nails | 3" edges 6" field |

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 degree = 0.0175 rad, 1 pound per square foot = 47.8 N/m², 1 mile per hour = 0.447 m/s.

a. Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in Seismic Design Categories $C$, $D_0$, $D_1$ and $D_2$.

b. Applies to panels next to garage door opening when supporting gable end wall or roof load only. May only be used on one wall of the garage. In Seismic Design Categories $D_0$, $D_1$ and $D_2$, roof covering dead load may not exceed 3 psf.

c. Garage openings adjacent to a Method CS-G panel shall be provided with a header in accordance with Table R502.5(1). A full height clear opening shall not be permitted adjacent to a Method CS-G panel.

d. Method CS-SFB does not apply in Seismic Design Categories $D_0$, $D_1$ and $D_2$ and in areas where the wind speed exceeds 100 mph.

e. Method applies to detached one- and two-family dwellings in Seismic Design Categories $D_0$ through $D_2$ only.

f. Methods GB and PCP braced wall panel h/w ratio shall not exceed 1:1 in SDC D0, D1, or D2. Methods LIB, DWB, SFB, PBS, HPS, and PFG are not permitted in SDC D0, D1, or D2.

g. Use of staples in braced wall panels shall be prohibited in SDC D0, D1, or D2.

**25.03.18: AMENDMENT OF FIGURE R602.10.6.1:** Notwithstanding the provisions of Section 25.03.01 of this Article, Figure R602.10.6.1 of the Residential Code is amended to read as follows:

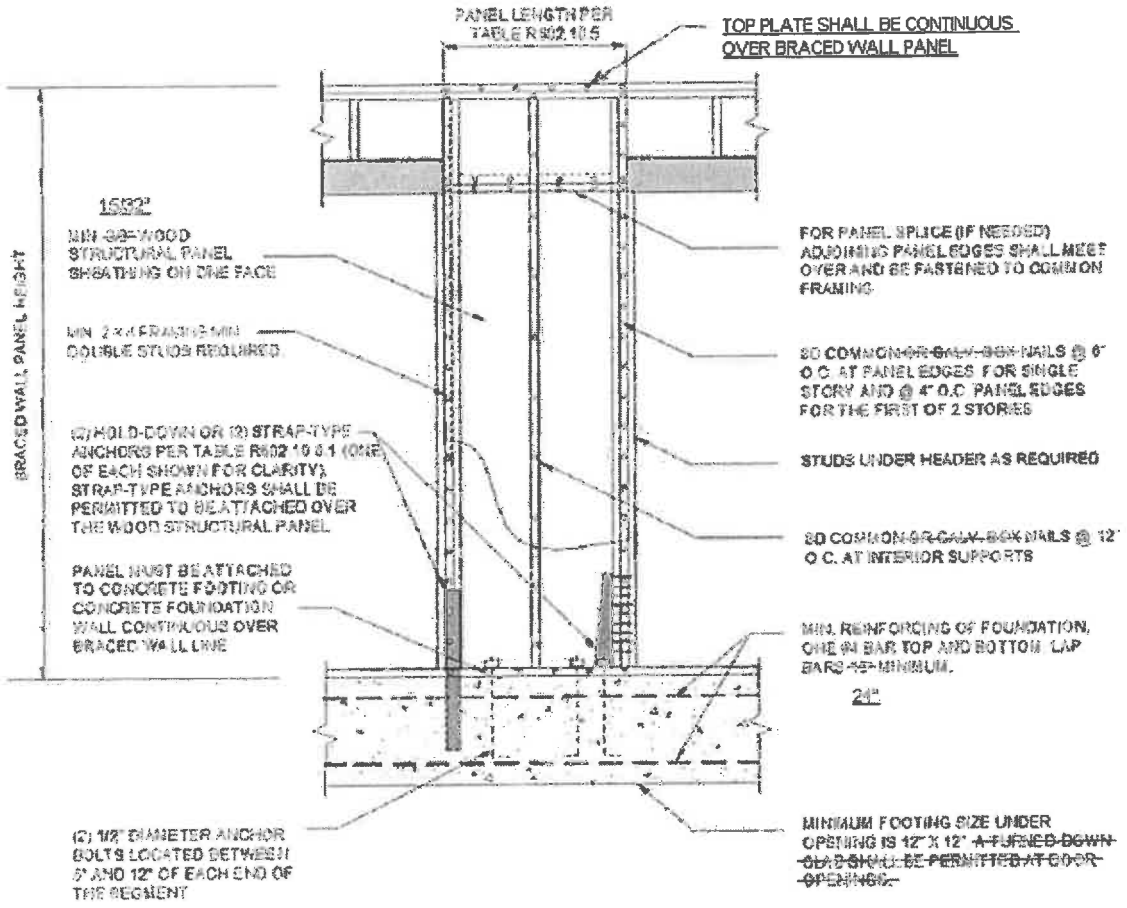



**FIGURE R602.10.6.1**
**METHOD ABW—ALTERNATE BRACED WALL PANEL**

**25.03.19: AMENDMENT OF FIGURE R602.10.6.2:** Notwithstanding the provisions of Section 25.03.01 of this Article, Figure R602.10.6.2 of the Residential Code is amended to read as follows:

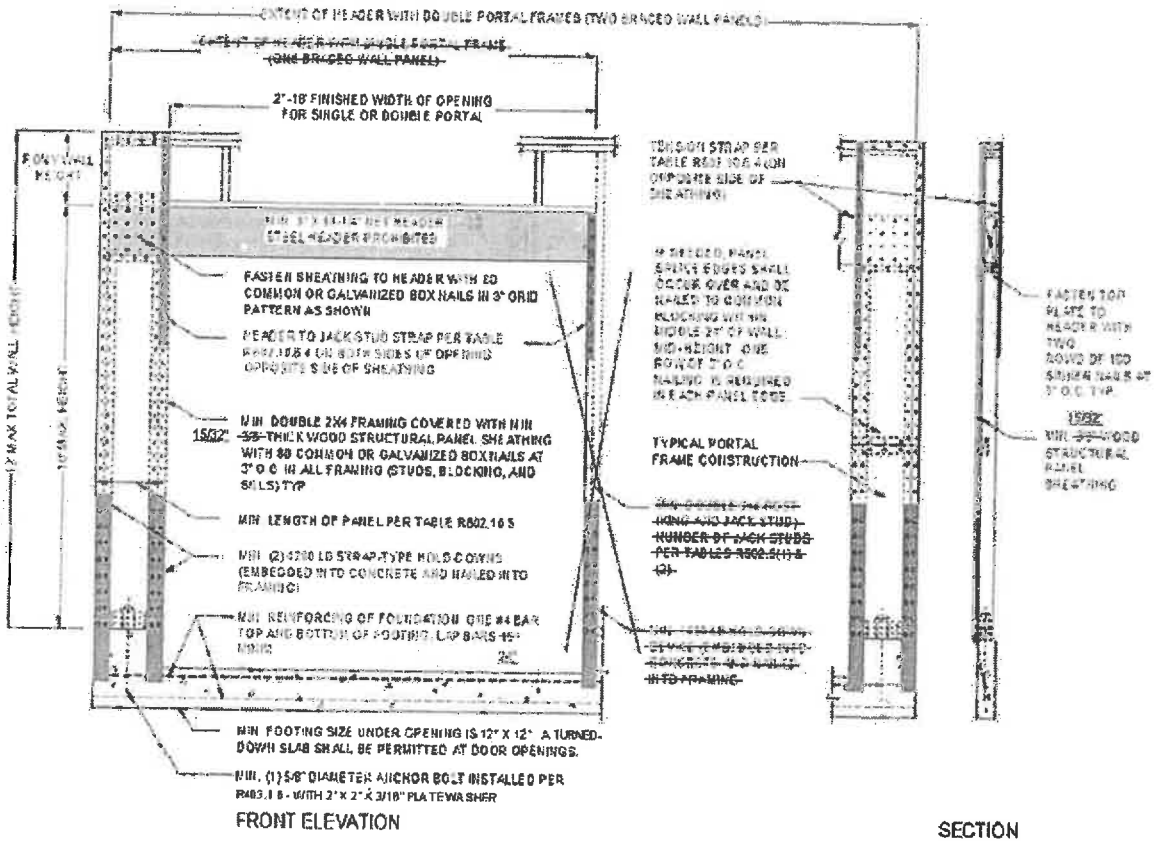



FIGURE R602.10.6.2
METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS
AT DETACHED GARAGE DOOR OPENINGS

**25.03.20: AMENDMENT OF TABLE R602.10.5:** Notwithstanding the provisions of Section 25.03.01 of this Article, Table R602.10.5 of the Residential Code is amended to read as follows:

**TABLE R602.10.5**
**MINIMUM LENGTH OF BRACED WALL PANELS**

| METHOD (See Table R602.10.4) | | MINIMUM LENGTH[a] (Inches) Wall Height | | | | | CONTRIBUTING LENGTH (Inches) |
|---|---|---|---|---|---|---|---|
| | | 8 feet | 9 feet | 10 feet | 11 feet | 12 feet | |
| DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP | | 48 | 48 | 48 | 53 | 58 | Actual[b] |
| GB | | 48 | 48 | 48 | 53 | 58 | Double sided = Actual<br>Single sided = 0.5 × Actual |
| LIB | | 55 | 62 | 69 | NP | NP | Actual[b] |
| ABW | SDC A, B and C, wind speed < 140 mph | 28 | 32 | 34 | 38 | 42 | 48 |
| | SDC $D_0$, $D_1$ and $D_2$, wind speed < 140 mph | 32 | 32 | 34 | NP | NP | |
| PFH | Supporting roof only | ~~16~~ 24 | ~~16~~ 24 | ~~16~~ 24 | ~~18~~ 24 | ~~20~~ 24 | 48 |
| | Supporting one story and roof | 24 | 24 | 24 | 27 | 29 | 48 |
| PFG | | 24 | 27 | 30 | 33[d] | 36[d] | 1.5 × Actual[b] |
| CS-G | | 24 | 27 | 30 | 33 | 36 | Actual[b] |
| CS-PF[e] | | ~~16~~ 24 | ~~16~~ 24 | ~~20~~ 24 | ~~22~~[e] 24 | 24[e] | Actual[b] |
| CS-WSP, CS-SFB | Adjacent clear opening height (inches) | | | | | | |
| | ≤ 64 | 24 | 27 | 30 | 33 | 36 | Actual[b] |
| | 68 | 26 | 27 | 30 | 33 | 36 | |
| | 72 | 27 | 27 | 30 | 33 | 36 | |
| | 76 | 30 | 29 | 30 | 33 | 36 | |
| | 80 | 32 | 30 | 30 | 33 | 36 | |
| | 84 | 35 | 32 | 32 | 33 | 36 | |
| | 88 | 38 | 35 | 33 | 33 | 36 | |
| | 92 | 43 | 37 | 35 | 35 | 36 | |
| | 96 | 48 | 41 | 38 | 36 | 36 | |
| | 100 | — | 44 | 40 | 38 | 38 | |
| | 104 | — | 49 | 43 | 40 | 39 | |
| | 108 | — | 54 | 46 | 43 | 41 | |
| | 112 | — | — | 50 | 45 | 43 | |
| | 116 | — | — | 55 | 48 | 45 | |
| | 120 | — | — | 60 | 52 | 48 | |
| | 124 | — | — | — | 56 | 51 | |
| | 128 | — | — | — | 61 | 54 | |
| | 132 | — | — | — | 66 | 58 | |
| | 136 | — | — | — | — | 62 | |
| | 140 | — | — | — | — | 66 | |
| | 144 | — | — | — | — | 72 | |

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s.
NP = Not Permitted.
a. Linear interpolation shall be permitted.
b. Use the actual length when it is greater than or equal to the minimum length.
c. Maximum header height for PFH is 10 feet in accordance with Figure R602.10.6.2, but wall height may be increased to 12 feet with pony wall.
d. Maximum opening height for PFG is 10 feet in accordance with Figure R602.10.6.3, but wall height may be increased to 12 feet with pony wall.
e. Maximum opening height for CS-PF is 10 feet in accordance with Figure R602.10.6.4, but wall height may be increased to 12 feet with pony wall.

**25.03.21: AMENDMENT OF SECTION R602.10.2.3**: Notwithstanding the provisions of Section 25.03.01 of this Article, Section R602.10.2.3 of the Residential Code is amended to read as follows:

**R602.10.2.3 Minimum number of braced wall panels.** Braced wall lines with a length of 16 feet (4877 mm) or less shall have a minimum of two braced wall panels of any length or

one braced wall panel equal to 48 inches (1219 mm) or more. Braced wall lines greater than 16 feet (4877 mm) shall have a minimum of two braced wall panels. No braced wall panel shall be less than 48 inches in length in Seismic Design Category $D_0$, $D_1$, or $D_2$.

**25.03.22: AMENDMENT OF SECTION R606.2.4:** Notwithstanding the provisions of Section 25.03.01 of this Article, Section R606.2.4 of the Residential Code is amended to read as follows:

**R606.2.4 Parapet walls.** Unreinforced solid masonry parapet walls shall not be less than 8 inches (203 mm) thick and their height shall not exceed four times their thickness. Unreinforced hollow unit masonry parapet walls shall be not less than 8 inches (203 mm) thick, and their height shall not exceed three times their thickness. Masonry parapet walls in areas subject to wind loads of 30 pounds per square foot (1.44 kPa) or located in Seismic Design Category D0, D1 or D2, or on townhouses in Seismic Design Category C shall be reinforced in accordance with Section R606.12.

**25.03.23: AMENDMENT OF SECTION R606.12.2.2.3:** Notwithstanding the provisions of Section 25.03.01 of this Article, Section R606.12.2.2.3 of the Residential Code is amended to read as follows:

**R606.12.2.2.3 Reinforcement requirements for masonry elements.** Masonry elements listed in Section R606.12.2.2.2 shall be reinforced in either the horizontal or vertical direction as shown in Figure R606.11(3) and in accordance with the following:

1. Horizontal reinforcement. Horizontal joint reinforcement shall consist of at least one No. 4 bar spaced not more than 48 inches (1219 mm).Horizontal reinforcement shall be provided within 16 inches (406 mm) of the top and bottom of these masonry elements.

2. Vertical reinforcement. Vertical reinforcement shall consist of at least one No. 4 bar spaced not more than 48 inches (1219 mm). Vertical reinforcement shall be within 8 inches (406mm) of the ends of masonry walls.

**25.03.24: AMENDMENT OF SECTION R602.3.2:** Notwithstanding the provisions of Section 25.03.01 of this Article, Exception in Section R602.3.2 of the Residential Code is amended to read as follows:

**Exception**: In other than Seismic Design Category $D_0$, $D_1$ or $D_2$, a single top plate may be installed in stud walls, provided the plate is adequately tied at joints, corners and interesting walls by a minimum 3-inch-by-6-inch by a 0.036-inch-thick (76 mm by 152 mm by 0.914 mm) galvanized steel plate that is nailed to each wall or segment of wall by six 8d nails on each side, provided the rafters or joists are centered over the studs with a tolerance of no more than 1 inch (25 mm). The top plate may be omitted over lintels that are adequately tied to adjacent wall sections with steel plates or equivalent as previously described.

**25.03.25: ADDITION OF SECTION R803.2.4:** Notwithstanding the provisions of Section 25.03.01 of this Article, Section R803.2.4 is added to the Residential Code to read as follows:

**R803.2.4 Openings in horizontal diaphragms.** Openings in horizontal diaphragms shall conform with Section R503.2.4.

**25.03.26: AMENDMENT OF SECTION R1001.3.1:** Notwithstanding the provisions of Section 25.03.01 of this Article, Section R1001.3.1 of the Residential Code is amended to read as follows:

**R1001.3.1 Vertical reinforcing.** For chimneys up to 40 inches (1016 mm) wide, four No. 4 continuous vertical bars adequately anchored into the concrete foundation shall be placed between wythes of solid masonry or within the cells of hollow unit masonry and grouted in accordance with Section R609. Grout shall be prevented from bonding with the flue liner so that the flue liner is free to move with thermal expansion. For chimneys more than 40 inches (1016 mm) wide, two additional No. 4 vertical bars adequately anchored into the concrete foundation shall be provided for each additional flue incorporated into the chimney or for each additional 40 inches (1016 mm) in width or fraction thereof.

**SECTION 4.** New Article 04 Plumbing Code is added to Chapter 25 of the San Marino City Code, to read as follows:

**Article 04**

**PLUMBING CODE**

**SECTION:**



**25.04.01: PLUMBING CODE ADOPTED:** Except as hereinafter provided, the California Plumbing Code, 2013 Edition, based on the 2012 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials, including all appendices, is hereby adopted by reference and incorporated herein as though fully set forth herein and shall constitute the Plumbing Code of the City. For the purpose of this Code, the Planning and Building Director shall be the Building Official. A copy of said Code has been deposited in the office of the City Clerk and shall be, at all times, maintained by the City Clerk

for use and examination by the public.

**25.04.02: AMENDMENT OF SECTION 102.3:** Notwithstanding the provisions of Section 25.04.01 of this Article, Section 102.3 of the Plumbing Code is amended to read as follows:

**Section 102.3 Violations and Penalties.**

**102.3.1 Violations.** It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert, demolish, equip, use, or maintain any plumbing or permit the same to be done in violation of the Plumbing Code.

**102.3.2 Penalties.** Any person, firm or corporation violating any provision of the Plumbing Code shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be punishable as provided in Section 01.04.03A of this Code. Each separate day or any portion thereof, during which any violation of this code occurs or continues, shall be deemed to constitute a separate offence.

**25.04.03: AMENDMENT OF SECTION 103.3.1:** Notwithstanding the provisions of Section 25.04.01 of this Article, the first paragraph of Section 103.3.1 of the Plumbing Code is amended to read as follows:

**103.3.1 Issuance.** The Building Official or his/her designee shall review the application, plans and specifications and other data filed by an applicant for a permit. Other departments of this jurisdiction may also review plans. If the Building Official or his/her designee finds that the work described in an application for permit and the plans, specifications and other data filed therewith conform to the requirements of the Plumbing Code and other pertinent laws and ordinances, and that the fees established by resolution of the City Council have been paid, he/she shall issue a permit therefore to the applicant.

**25.04.04: AMENDMENT OF SECTION 103.3.4:** Notwithstanding the provisions of Section 25.04.01 of this Article, the first paragraph of Section 103.3.4 of the Plumbing Code is amended to read as follows:

**103.3.4 Expiration.** Every permit issued by the Building Official or his/her designee under the provisions of the Plumbing Code shall expire by limitation and become null and void if the work authorized by such permit is not commenced within 180 days from the date of such permit, or if the work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days. Before such work can be recommenced, the permit shall first be renewed, provided no changes have been made or will be made in the original plans and specifications for such work. If an applicant wishes to renew a permit that has been expired for less than 180 days, 50% of the original fees paid shall be required to renew the permit. If an applicant wishes to renew a permit that has been expired for more than 180 days, 100% of the original fees paid shall be required to renew the permit. The Building Official may extend the permit expiration date for a period not exceeding 180 days on written request (submitted prior to the expiration date) by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once.

**25.04.05: AMENDMENT OF SECTION 103.3.5:** Notwithstanding the provisions of Section 25.04.01 of this Article, Section 103.3.5 of the Plumbing Code is amended to read as

follows:

**103.3.5 Suspension or revocation.** The Building Official or his/her designee may, in writing, suspend or revoke a permit issued under the provisions of this Code whenever the permit is issued in error or on the basis of incorrect information supplied or in violation of other ordinances or regulations of the City.

**25.04.06: AMENDMENT OF SECTION 103.4**: Notwithstanding the provisions of Section 25.04.01 of this Article, Section 103.4 of the Plumbing Code is amended to read as follows:

**103.4.1 Permit fees.** All fees pursuant to the Plumbing Code as set forth in Table No. 1.1 shall be established by resolution of the City Council.

**103.4.2 Plan review fees.** When a plan or other data are required to be submitted by Section 103.2.2, a plan review fee shall be paid at the time of submitting plans and specifications for review. The plan review fees for plumbing work shall be equal to 100 percent of the total permit fee as established by resolution of the City Council. When plans are incomplete or changed so as to require additional plan review, a fee shall be charged in the amount established by resolution of the City Council.

**103.4.3 Expiration of Plan Review.** Applications for which no permit is issued within 180 days following the date of application shall expire by limitation, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the Building Official. The Building Official may extend the time for action by the applicant for a period not exceeding 180 days upon request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee.

**103.4.4 Investigation Fees: Work without a permit.**

**103.4.4.1** Whenever any work for which a permit is required by the Plumbing Code has been commenced without first obtaining said permit, a special investigation shall be made before a permit may be issued for such work.

**103.4.4.2** An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee that would be required by the Plumbing Code if a permit were to be issued. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of the Plumbing Code nor from any penalty prescribed by law.

**103.4.5 Fee Refunds.**

**103.4.5.1** The Building Official may authorize the refunding of any fee paid hereunder which was erroneously paid or collected.

**103.4.5.2** The Building Official may authorize refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with the Plumbing Code.

**103.4.5.3** The Building Official shall not authorize the refunding of any fee paid except upon written application filed by the original permittee not later than one hundred eighty (180) days after the date of fee payment.

**25.04.07: AMENDMENT OF SECTION 103.5.6**: Notwithstanding the provisions of Section 25.04.01 of this Article, the fourth paragraph of Section 103.5.6 of the Plumbing Code is amended to read as follows:

To obtain reinspection, the applicant shall file an application therefor in writing upon a form furnished for that purpose and pay the reinspection fee established by resolution of the City Council.

**25.04.08: AMENDMENT OF SECTION 203**: Notwithstanding the provisions of Section 25.04.01 of this Article, Section 203 of the Plumbing Code is amended by revising the following definitions to read as follows:

**Accessible.** "Accessible," when applied to a fixture, connection, appliance, or equipment, shall mean having access thereto, but which first may require the removal of an access panel, door, or similar obstruction; "readily accessible" shall mean direct access without the necessity of removing any panel, door, or similar obstruction. Attic and underfloor areas are to be considered "accessible."

**Authority Having Jurisdiction.** Whenever the term "Authority Having Jurisdiction" is used in the Plumbing Code, it shall mean the Building Official or his/her authorized representative.

**25.04.09: ADDITION OF SECTION 313.13**: Notwithstanding the provisions of Section 25.04.01 of this Article, Section 313.13 is added to the Plumbing Code to read as follows:

**313.13** Soil, waste, water or other pipe or conduit, except downspouts, shall not be installed or permitted on the outside of a building.

**25.04.10: ADDITION OF SUBSECTION 510.7.3.4**: Notwithstanding the provisions of Section 25.04.01 of this Article, subsection 510.7.3.4 is added to the Plumbing Code read as follows:

**510.7.3.4** No vent shall terminate in a location that is visible from the parkway across the street from the subject property, or to the side elevation facing a side street on a corner lot.

**25.04.11: ADDITION OF SECTION 713.7**: Notwithstanding the provisions of Section 25.04.01 of this Article, Section 713.7 is added to the Plumbing Code read as follows:

**713.7** The City Engineer shall determine the availability of the sewer lines. No person shall construct, or enlarge a new or existing cesspool if a sewer line has been declared available.

**25.04.12: ADDITION OF SECTION 906.8**: Notwithstanding the provisions of Section 25.04.01 of this Article, Section 906.8 is added to the Plumbing Code to read as follows:

**906.8** No vent shall terminate in a location that is visible from the parkway across the street from the subject property, or to the side elevation facing a side street on a corner lot.

**SECTION 5.** New Article 05 Mechanical Code is hereby added to Chapter 25 of the San Marino City Code to read as follows:

## Article 05

## MECHANICAL CODE

**SECTION:**



**25.05.01: MECHANICAL CODE ADOPTED:** Except as hereinafter provided, the California Mechanical Code, 2013 Edition, based on the 2012 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials, including all appendices, is hereby adopted by reference and incorporated herein as though fully set forth herein and shall constitute the Mechanical Code of the City. A copy of such Code shall be located in the office of the City Clerk and shall be, at all times, maintained by the Planning and Building Department for use and examination by the public. For the purposes of this Code, the Planning and Building Director shall be the Building Official.

**25.05.02: AMENDMENT OF SECTION 111.0.** Notwithstanding the provisions of Section 25.05.01 of this Article, Section 111.0 of the Mechanical Code is amended to read as follows:

**111.0 Violations.** It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, impound, remove, convert or demolish, equip, use or maintain mechanical systems or equipment or cause or permit the same to be done in violation of the Mechanical Code.

It is hereby declared that any violation of the Mechanical Code constitutes a public nuisance, and in addition to any other remedies provided by the Mechanical Code for its enforcement, the administrative authority may bring civil suit to enjoin the violation of any provisions of the Mechanical Code.

Any person, firm or corporation violating any of the provisions of the Mechanical Code shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punishable as provided in Section 01.04.03A of this Code. Each separate day or any portion thereof during which violation of the Mechanical Code occurs or continues shall be deemed to constitute a separate offense, and upon conviction thereof shall be punishable as herein provided.

**25.05.03: AMENDMENT OF SECTION 110.1:** Notwithstanding the provisions of Section 25.05.01 of this Article, Section 110.1 of the Mechanical Code is hereby amended to read as follows:

**110.1 General.** In order to hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretation of the

Mechanical Code, there shall be and is hereby created a Board of Appeals consisting of the members of the City Council. The Building Official shall be an ex officio member of and shall act as Secretary to said Board but shall have no vote on any matter before the Board. The Board shall adopt rules of procedures for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the Building Official. The Board may request the services of members of the community who are qualified by experience and training to interpret matters pertaining to the Mechanical Code to act as technical assistants to the Board. Technical assistants shall have no vote on any matter before the Board.

**25.05.04: AMENDMENT OF SECTION 112.1**: Notwithstanding the provisions of Section 25.05.01 of this Article, Section 112.1 of the Mechanical Code is amended to include an additional paragraph to read as follows:

The Building Official shall review applications, plans, specifications, computations and other data filed by an applicant for a permit. Such plans may be reviewed by other departments of this City to verify compliance with applicable laws under their jurisdiction. If the Building Official finds that the work described in an application for a permit and the plans, specifications and other data filed therewith conform to the requirements of the Mechanical Code and other pertinent laws and ordinances and that the fees established by Resolution of the City Council have been paid, the Building Official shall issue a permit therefore to the applicant.

**25.05.05: AMENDMENT OF SECTIONS 114.4 AND 114.5:** Notwithstanding the provisions of Section 25.05.01 of this Article, Sections 114.4 and 114.5 of the Mechanical Code are amended to read as follows:

**114.4 Expiration.** Every permit issued by the Building Official or his/her designee under the provisions of the Mechanical Code shall expire by limitation and become null and void if the work authorized by such permit is not commenced within 180 days from the date of such permit, or if the work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days. Before such work can be recommenced, the permit shall first be renewed, provided no changes have been made or will be made in the original plans and specifications for such work. If an applicant wishes to renew a permit that has been expired for less than 180 days, 50% of the original fees paid shall be required to renew the permit. If an applicant wishes to renew a permit that has been expired for more than 180 days, 100% of the original fees paid shall be required to renew the permit. The Building Official may extend the permit expiration date for a period not exceeding 180 days on written request (submitted prior to the expiration date) by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once.

**114.5 Suspension or Revocation.** The Building Official may, in writing, suspend or revoke a permit issued under the provisions of the City Code whenever the permit is issued in error or on the basis of incorrect information supplied or in violation of other ordinances or regulations of the City.

**25.05.06: AMENDMENT OF SECTION 115**: Notwithstanding the provisions of Section 25.05.01 of this Article, Section 115 of the Mechanical Code is amended to read as follows:

**115.0 FEES.**

**115.1 Fees General.** All fees pursuant to the Mechanical Code shall be as established by and set forth in a resolution of the City Council.

**115.2 Permit Fees.** All fees pursuant to the Mechanical Code shall be as amended and established by resolution of the City Council.

**115.3 Plan Review Fees.** When a plan or other data are required to be submitted by this code a plan review fee shall be paid at the time of submitting plans and specifications for review. The plan review fees for mechanical work shall be equal to 100 percent of the total permit fee as established by resolution of the City Council. The plan review fees specified in this subsection are separate fees from the permit fees specified in Section 115.1 and are in addition to the permit fees. When plans are incomplete or changed so as to require additional plan review, a fee shall be charged in the amount established by resolution of the City Council.

**115.4 Expiration of Plan Review.** Applications for which no permit is issued within 180 days following the date of application shall expire by limitation, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the Building Official. The Building Official may extend the time for action by the applicant for a period not exceeding 180 days upon request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once. In order to renew action on an application after expiration the applicant shall resubmit plans and pay a new plan review fee.

**115.5 Investigation Fee: Work Without a Permit.**

**115.5.1 Investigation.** Whenever any work which requires a permit pursuant to the Mechanical Code has been commenced without first obtaining said permit, a special Investigation shall be made before a permit may be issued for such work.

**115.5.2 Fee.** An investigation fee, in addition to the permit fee, shall be collected whether or not a permit fee is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee that would be required by the City Code if a permit were to be issued. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of the Mechanical Code nor from any penalty prescribed by law.

**115.6 Fee Refunds.**

**115.6.1** The Building Official may authorize the refunding of any fee paid hereunder that was erroneously paid or collected.

**115.6.2** The Building Official may authorize the refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with the Mechanical Code.

**115.6.3** The Planning and Building Department shall not authorize refunding of any fee paid except upon written application filed by the original permittee not later than one hundred eighty (180) days after the date of fee payment.

**SECTION 6.** New Article 06 Electrical Code is hereby added to Chapter 25 of the San Marino City Code to read as follows:

## Article 06

## ELECTRICAL CODE

**SECTION:**



**25.06.01: ELECTRICAL CODE ADOPTED**: Except as hereinafter provided, the California Electrical Code, 2013 Edition, based on the 2011 National Electrical Code as published by the National Fire Protection Association, including all annexes, is hereby adopted by reference and incorporated herein as though set forth herein in full and shall constitute the Electrical Code of the City. A copy of such Code shall be located in the Planning and Building Department and shall be, at all times, maintained by the Planning and Building Department for use and examination by the public. For the purpose of this Code, the Planning and Building Director shall be the Building Official.

**25.06.02: AMENDMENT OF ARTICLE 100**: Notwithstanding the provisions of Section 25.06.01 of this Article, Article 100 of the Electrical Code is amended by amending the definition of "Accessible, Readily" to read as follows:

**Accessible, Readily: (Readily Accessible.)** Capable of being reached quickly for operation, renewal, or inspections, without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders, chairs, etc. (See "Accessible.") Attic and crawl spaces are not considered readily accessible.

**25.06.03: FEES AND EXPIRATION**: Notwithstanding the provisions of Section 25.06.01 of this Article, all fees pursuant to the Electrical Code shall be those amounts established by resolution of the City Council.

**Plan Review Fees.** When a plan or other data are required to be submitted by this code a plan review fee shall be paid at the time of submitting plans and specifications for review. The plan review fees for electrical work shall be equal to 100 percent of the total permit fee as established by resolution of the City Council. The plan review fees specified in this subsection are separate fees from the permit fees and are in addition to the permit fees. When plans are incomplete or changed so as to require additional plan review, a fee shall be charged in the amount established by resolution of the City Council.

**Expiration of Plan Review.** Applications for which no permit is issued within 180 days following the date of application shall expire by limitation, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the Building Official. The Building Official may extend the time for action by the applicant for a period not exceeding 180 days upon request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once. In order to renew action on an application after expiration the applicant shall resubmit plans and pay a new plan review fee.

**Investigation.** Whenever any work which requires a permit pursuant to the Electrical Code has been commenced without first obtaining said permit, a special Investigation shall be made before a permit may be issued for such work.

**Investigation Fee.** An investigation fee, in addition to the permit fee, shall be collected whether or not a permit fee is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee that would be required by the City Code if a permit were to be issued. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of the Electrical Code nor from any penalty prescribed by law.

**Fee Refunds.** The Building Official may authorize the refunding of any fee paid hereunder that was erroneously paid or collected. The Building Official may authorize the refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with the Electrical Code. The Planning and Building Department shall not authorize refunding of any fee paid except upon written application filed by the original permittee not later than one hundred eighty (180) days after the date of fee payment.

**Expiration.** Every permit issued by the Building Official or his/her designee under the provisions of the Electrical Code shall expire by limitation and become null and void if the work authorized by such permit is not commenced within 180 days from the date of such permit, or if the work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days. Before such work can be recommenced, the permit shall first be renewed, provided no changes have been made or will be made in the original plans and specifications for such work. If an applicant wishes to renew a permit that has been expired for less than 180 days, 50% of the original fees paid shall be required to renew the permit. If an applicant wishes to renew a permit that has been expired for more than 180 days, 100% of the original fees paid shall be required to renew the permit. The Building Official may extend the permit expiration date for a period not exceeding 180 days on written request (submitted prior to the expiration date) by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once.

**25.06.04: ADDITIONS TO ELECTRICAL CODE:** Notwithstanding the provisions of Section 25.06.01 of this Article, the Electrical Code is amended by adding the sections as set forth in Sections 25.06.05 through 25.06.11 of this Article.

**25.06.05: SERVICE ENTRANCE PANELS:**

A. All new residences shall be provided with a minimum service capacity of not less than two hundred (200) amperes main. Service conduit shall be two-inch (2") conduit.

B. On existing dwellings if the service is replaced, the minimum service shall be one hundred (100) amperes main. Service conduit shall be one and one-half inches (1 ½").

C. Branch circuit panel shall contain space for a minimum of twenty (20) single pole overcurrent devices.

**25.06.06: GROUNDING AND BONDING CONNECTIONS:**

A. The connection of grounding conductor to grounding electrode shall be readily accessible.

B. The connection of the bond from the grounding conductor to the cold water and gas systems shall be readily accessible.

C. All conduit shall contain a green ground wire.

**25.06.07: USE OF FACTORY ASSEMBLED CONDUITS:** Notwithstanding any provision of the Electrical Code to the contrary, the following is prohibited in new installations:

A. Factory assembled conduits, such as:

1. Mineral insulated sheathed cable.

2. Armored cable unless:

a. Factory assembled in an Underwriters Laboratory approved fixture;

b. Green insulated copper grounding conductor; and

c. Is used for applications not to exceed nine feet (9') from a power source to a single fixture.

3. Extension of any knob and tube.

**25.06.08: USE OF ALUMINUM:** Notwithstanding any provision of the Electrical Code to the contrary, the following are prohibited in new installations:

A. Aluminum wire is not permitted.

B. Aluminum conduit is not approved as a self-grounding conduit.

**25.06.09: SERVICE ENTRANCE - SERVICES:**

A. New service entrance conductors on all commercial buildings shall be installed underground.

B. A contractor licensed C-10 or B-1 must apply for the permit for any new service or service change out.

**25.06.10: AMENDMENT TO SECTION 250.50:** Notwithstanding the provisions of

Section 25.06.01, an additional exception is added to Section 250.50 to read as follows:

Exception: Grounding of electrical services replaced in existing residential buildings.

When an electrical service in an existing R1 or R3 occupancy is replaced or upgraded, and the material of the water pipe in direct contact with the earth is unknown, the connection of the grounding conductor to the interior metal water pipe may be made at any accessible point, provided that at least one grounding electrode of a type specified in Sections 250.50 or 250.52 is installed as close as possible to the service and connected directly to the service equipment with an independent grounding electrode conductor.

**25.06.11: ADDITION OF SECTION 690.19**: Notwithstanding the provisions of Section 25.06.01, Section 690.19 is added to the Electrical Code to read as follows:

**690.19 Disconnecting Means for Multiple Arrays.** Where more than one array is combined to form a single output rated more than 50 volts and/or 10 amperes, a disconnecting means rated for the output shall be installed immediately adjacent to the combiner box on the output side.

Exception: If the combiner box is located adjacent to the inverter(s), the disconnecting means as stated above shall not be required.

**25.05.12: VIOLATIONS**: Any person, firm or corporation violating any of the provisions or failing to comply with any of the mandatory requirements of the Electrical Code shall be guilty of a misdemeanor and upon conviction thereof shall be punishable as provided in subsection 01.04.03A of this Code. Each such person shall be guilty of a separate offense for each and every day during any portion of which any violation of any provision of the Electrical Code is committed, continued or permitted by any such person, and he/she shall be punishable as herein provided.

**SECTION 7.** New Article 09 Energy Code is added to Chapter 25 of the San Marino City Code, to read as follows:

**Article 09**

**ENERGY CODE**

**SECTION:**



**25.09.01: ENERGY CODE ADOPTED**: Except as hereinafter provided, the California Energy Code, 2013 Edition, as published by the California Building Standards Commission, including all appendices, is hereby adopted by reference and incorporated herein as though fully set forth herein and shall constitute the Energy Code of the City. A copy of said Code shall be located in the Planning and Building Department and shall be, at all times, maintained by the Planning and Building Department for use and examination by the public.

**25.09.02: VIOLATIONS**: Any person, firm or corporation violating any of the provisions or failing to comply with any of the mandatory requirements of this Article shall be

guilty of a misdemeanor and upon conviction thereof shall be punishable as provided in subsection 01.04.03A of this Code. Each such person shall be guilty of a separate offense for each and every day during any portion of which any violation of any provision of this Article is committed, continued or permitted by any such person, and he/she shall be punishable as herein provided.

**SECTION 8.** New Article 10 Administrative Code is hereby added to Chapter 25 of the San Marino City Code to read as follows:

## Article 10

## ADMINISTRATIVE CODE

**25.10.01 Administrative Code Adopted**

**25.10.01: ADMINISTRATIVE CODE ADOPTED:** Except as hereinafter provided, the California Administrative Code, 2013 Edition, as published by the California Building Standards Commission, is hereby adopted by reference and incorporated herein as though fully set forth herein and shall constitute the Administrative Code of the City. A copy of said Code shall be located in the Planning and Building Department and shall be, at all times, maintained by the Planning and Building Department for use and examination by the public.

**SECTION 9.** New Article 12 Fire Code is hereby added to Chapter 25 of the San Marino City Code to read as follows:

## Article 12

## FIRE CODE

**SECTION:**



**25.12.01: FIRE CODE ADOPTED:** Except as hereinafter provided, the 2013 California Fire Code, including all appendices with errata, based on the 2012 International Fire

Code, is hereby adopted by reference and incorporated herein as though fully set forth herein and shall constitute the Fire Code of the City. A copy of such Code shall be located in the Planning and Building Department and shall be, at all times, maintained by the Planning and Building Department for use and examination by the public. For the purpose of this Code, the Planning and Building Director shall be the Building Official.

**25.12.02: ADDITION OF SECTION 106.2.3:** Notwithstanding the provisions of Section 25.12.01 of this Article, Section 106.2.3 is added to the Fire Code to read as follows:

**106.2.3 Annual inspection.** All properties located in the High Fire Hazard Severity Zone as indentified by the San Marino Fire Department shall be inspected annually for compliance with state and local brush clearance requirements by the Fire Official.

**25.12.03: AMENDMENT OF SECTION 108:** Notwithstanding the provisions of Section 25.12.01 of this Article, Section 108 of the Fire Code is amended to read as follows:

**108 Appeals.** Whenever the Fire Chief disapproves an application or refuses to grant a permit applied for, or when it is claimed that the provisions of the Fire Code do not apply or that the true intent and meaning of the Fire Code have been misconstrued or wrongly interpreted, the applicant may appeal the Fire Chief's decision to the City Manager within thirty (30) days from the date of the decision appealed.

If the City Manager upholds the decision of the Fire Chief, the applicant may appeal the decision to the City Council by filing a notice of appeal with the City Clerk within ten (10) days from the date of the City Manager's decision.

**25.12.04: AMENDMENT OF SECTION 109.3.** Notwithstanding the provisions of Section 25.12.01 of this Article, Section 109.3 of the Fire Code is amended to read as follows:

**109.3 Violation penalties.** Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair, or do work in violation of the approved construction document or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a misdemeanor, punishable by a fine as established by the City Council or by imprisonment, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue; and all such persons shall be required to correct or remedy such violations or defects in a timely manner as specified by the chief or authorized representative. The application of the above penalties shall not be held to prevent the enforced removal of prohibited conditions.

**25.12.05: ADDITION OF SECTION 109.3.5:** Notwithstanding the provisions of Section 25.12.01 of this Article, Section 109.3.5 is added to the Fire Code to read as follows:

**109.3.5 Citations.** Persons operating or maintaining an occupancy, premises, or vehicle or performing work which requires a permit by this code, who allow a hazard to exist or fail to take immediate action to abate a hazard on such occupancy, premises, or vehicle or who fail to obtain a permit prior to start of work which requires such a permit under this code, when ordered or notified to do so by the Fire Official, shall be guilty of a misdemeanor.

**25.12.06: ADDITION OF SECTION 113.1.1:** Notwithstanding the provisions of

Section 25.12.01 of this Article, Section 113.1.1 is hereby added to the Fire Code to read as follows:

**Section 113.1.1 Establishment of fees.** All fees pursuant to the Fire Code shall be established by resolution of the City Council.

**25.12.07: ADDITION OF SECTION 307.6:** Notwithstanding the provisions of Section 25.12.01 of this Article, Section 307.6 is added to the Fire Code to read as follows:

**307.6 Outdoor fireplaces, fire pits, and decorative fire features.** Outdoor fireplaces, fire pits, and decorative fire features shall be installed and used in accordance with the manufacturer's instructions. In the absence of manufacturer's instructions, the Fire Chief or designee has the ability to determine proper installation location and area of operation. In most cases, a minimum of 10 feet clearance will be required from a structure or combustible materials and vegetation. Fireplaces, fire pits, and decorative fire features, as identified under this code section, shall be gas fuel-fired and have an approved and listed spark arrestor as necessary.

**25.12.08: ADDITION OF SECTION 308.1.4.1:** Notwithstanding the provisions of Section 25.12.01 of this Article, Section 308.1.4.1 is added to the Fire Code to read as follows:

**308.1.4.1 Open-flame cooking devices.** Charcoal burners, gas fuel-fired barbeques and other open-flame cooking devices shall be installed and used in accordance with the manufacturer's instructions. In the absence of manufacturer's instructions, the Fire Chief or designee has the ability to determine proper installation location and area of operation. In most cases, a minimum of 6 feet vertical (overhead) clearance and 2 feet horizontal (surrounding) clearance will be required from a structure or combustible materials and vegetation.

**25.12.9: ADDITION OF SECTION 506.1.3:** Notwithstanding the provisions of Section 25.12.01 of this Article, Section 506.1.3 is added to the Fire Code to read as follows:

**506.1.3 Key boxes and switches.** An approved key box or switch shall be installed on motorized or lockable gates, perimeter fencing or similar barricades that obstruct access to a property when required by the Fire Code Official.

**25.12.10: AMENDMENT OF SECTION 903.2:** Notwithstanding the provisions of Section 25.12.01 of this Article, Section 903.2 of the Fire Code is amended to read as follows:

**903.2 Where required.**

a. An automatic fire-extinguishing (sprinkler) system shall be installed in every new building in the City, including any new residential building, hereinafter constructed or moved into the City, regardless of an area separation or type of construction.

   Exception: New buildings less than 720 square feet may be exempted with the concurrence of the Fire Chief and Building Official.

b. Existing single family dwellings shall be required to install a full automatic fire sprinkler system in existing and new portions of the building when greater than 720 square feet is added above the first floor, a basement exceeding 300 square feet is added, an addition of more than 1500 square feet is added, more than 50% of the existing roof structure or ceiling area is replaced or exposed, or the used for human occupancy is increased by more than 50%. Percentage calculations with regard to roof structure or ceiling area will include any newly permitted or added square footage.

c. An automatic fire sprinkler system shall be installed in any "U" occupancy whenever any portion of said "U" occupancy is located beneath any portion of a building used for human occupancy.

d. An automatic fire sprinkler system shall be installed in any "U" occupancy whenever the ceiling of said "U" occupancy is located fewer than seven (7) feet above the adjacent grade.

e. An automatic fire sprinkler system shall be installed in any "U" occupancy that is located closer than 15'to an adjacent building used for human occupancy.

f. Additions - An automatic fire sprinkler system shall be installed with an addition, renovation or remodeling of any existing commercial building, when the value thereof exceeds more than twenty percent (20%) of the market value of the existing building. All such additions, renovations, or remodeling performed fewer than five (5) years prior to the effective date of this Section shall be considered in determining the cumulative value under this Section. The value of the proposed construction and of the existing building shall be determined by the Building Official based upon the latest edition of the "Building Valuation Data" as published by the International Code Council (ICC).

g. An approved automatic sprinkler head shall be provided in new elevator pits.

h. Installation, approval and maintenance of automatic fire-extinguishing (sprinkler) systems shall be in compliance with the most current National Fire Protection Association Standards #13, #13R, #13D, and the California Fire Code, as adopted and amended by the City.

i. Automatic fire-extinguishing systems shall be installed and maintained at the owner's expense.

j. If the Fire Chief and the Building Official determine access for fire apparatus and equipment to any building or structure, not otherwise required hereunder to maintain an automatic fire-extinguishing system is unduly difficult, installation of an automatic fire-extinguishing system shall be required.

**25.12.11: AMENDMENT OF SECTION 903.4:** Notwithstanding the provisions of Section 25.12.01 of this Article, Section 903.4, Exception 1, of the Fire Code is amended to read as follows:

1. Automatic sprinkler systems protecting single-family dwellings shall have the flow switch electrically supervised by an approved supervising station.

**25.12.12: ADDITION OF SECTION 906.1.1:** Notwithstanding the provisions of Section 25.12.01 of this Article, Section 906.1.1 is added to the Fire Code to read as follows:

**906.1.1 Minimum requirement.** Portable fire extinguishers of a 2A10BC type shall be installed in all occupancies and locations as set forth in the Fire Code and as required by the Fire Chief.

Exceptions:

1. Other portable fire extinguishers may be installed, if approved by the Fire Chief.
2. Group R, Division 3 and Group U occupancies are exempt.

**25.12.13: ADDITION OF SUBSECTION 907.2A:** Notwithstanding the provisions of Section 25.12.01 of this Article, Subsection 907.2A is added to the Fire Code to read as follows:

**907.2A** Monitored smoke and heat detectors shall be installed in the following locations:

1. Every new residential building in the City hereinafter constructed or moved into the City, regardless of area of separation or type of construction.

Exception: New buildings less than 720 square feet may be exempted with the concurrence of the Fire Chief and Building Official.

2. All residential buildings upon the occurrence of both the following conditions: (1) Addition(s) to any building or structure creating a total area exceeding 1,500 square feet; and (2) The additional used for human occupancy is greater than 720 square feet cumulative over a three year period.

3. All commercial buildings upon the occurrence of both the following conditions: (1) Addition(s) to any building or structure creating a total area exceeding 3000 square feet; and (2) The additional area used for human occupancy is greater than 720 square feet cumulative over a three year period.

The devices shall be installed in a manner conforming to the most current requirements of the International Code Council and the National Fire Protection Association Standards, according to the following guidelines:

1. A minimum of one photoelectric smoke detector on each level of living space and in the hallway outside a sleeping area.

2. A rate of rise heat detector in the attic, kitchen, basement and "U" occupancy that is located closer than 15' to an adjacent building used for human occupancy.

3. A combination fire/security panel will be allowed, but all devices must be shown on the submitted plans.

4. The fire system shall be addressable.

**25.12.14: AMENDMENT OF SECTION 907.6.5:** Notwithstanding the provisions of Section 25.12.01 of this Article, Section 907.6.5, Exception 3, of the Fire Code is amended to read as follows:

3. Automatic sprinkler systems protecting single-family dwellings shall have smoke and heat detectors installed that are monitored by an approved supervising station.

**25.12.15: AMENDMENT OF SECTION 3103.2:** Notwithstanding the provisions of Section 25.12.01 of this Article, Section 3103.2 of the Fire Code is amended to read as follows:

**3103.2 Approval required.** Tents and membrane structures having an area in excess of 250 square feet, shall not be erected, operated or maintained for any purpose without first obtaining a permit and approval from the Fire Chef.

Exceptions:

1. Tents used exclusively for recreational camping purposes.

**25.12.16: ADDITION OF SECTION 5608:** Notwithstanding the provisions of Section 25.12.01 of this Article, Section 5608.2 is added to the Fire Code to read as follows:

**5608.2** The manufacturing, possession, storage, sale, use and handling of fireworks, other than "safe and sane" fireworks, is prohibited. The display, use or sale of fireworks described as "Safe and Sane" by the State Fire Marshal, is prohibited.

Exceptions: 1. Storage of fireworks is allowed in accordance with the requirements for low order explosives in Title 19, California Code of Regulations, Chapter 10.

2. Use and handling of fireworks for professional display by a state licensed pyrotechnician in accordance with Title 19, California Code of Regulations, Chapter 6, if permitted by the Fire Chief.

**25.12.17: ADDITION OF SECTION 4908:** Notwithstanding the provisions of Section 25.12.01 of this Article, Section 4908 is added to the Fire Code to read as follows:

**SECTION 4908**

**CLEARANCE OF HAZARDOUS VEGETATION FROM STRUCTURES AND ROADS WITHIN THE CITY OF SAN MARINO**

**4908.1 Statement of legislative intent and purpose.** It is the objective of this Section to promote and protect the public health, safety and welfare by recognizing that there exists within the City of San Marino a potentially hazardous fire situation created by grass, weeds, shrubs, and trees which are in such condition and location as to provide a ready fuel supply to augment the spread or intensity of fire. It is the intent of this Section to provide minimum standards to safeguard life, safety, property and the public welfare by insuring that hazardous vegetation or refuse is removed and that all grass, weeds, shrubs, and trees are properly maintained so as to not create a fire hazard within the community, while maintaining sufficient vegetation for aesthetic and soil erosion control purposes.

It is the further intent that this Section apply on a year-round basis to insure the removal and/or proper maintenance of grass, weeds, shrubs, trees and refuse in order to prevent the spread or intensity of fire within the community. Of particular concern is the need to provide adequate defensible space in the urban/wildland interface area of the city, referred to as the High Fire Hazard Severity Zone. For purposes of this Section, defensible space is that space within 100 feet (30.480 m) of a building or structure that is required for access by fire and other emergency personnel to defend the building or structure from the threat of fire.

**4908.2 Prohibition.** No person who has any ownership or possessory interest in, or control of a parcel of land shall allow to exist thereon any hazardous refuse or hazardous grass, weeds, shrubs, trees, or other vegetation, which, by reason of proximity to a building or

structure, constitutes a fire hazard. For purposes of this Section, hazardous grass, weeds, shrubs, trees, or other vegetation are defined as grass, weeds, shrubs, trees, or other vegetation which are in such condition and location, or by the unique characteristics of a species, as to provide a ready fuel supply to augment the spread or intensity of a fire.

**4908.3 Specific requirements.** In order to provide sufficient defensible space, each person who has any ownership or possessory interest in, or control of, a parcel of land shall:

**4908.3.1 General.** Remove from the property all hazardous vegetation, except as otherwise provided herein, if such vegetation is within 100 feet (30.480 m) of a building, within ten (10) feet (3.048 m) of a combustible fence, or within ten (10) feet (3.048 m) of any portion of any highway, street, alley, or driveway improved or used for vehicular travel or other vehicular purposes. Distances up to 200 feet (60.960 m) or greater from a building or structure may be necessary as determined by the Chief. This requirement does not apply to the maintenance of trees, ornamental shrubbery or plants which are used as ground cover, provided such are landscape materials that are properly irrigated and maintained and do not provide a ready fuel supply to augment the spread or intensity of a fire.

**4908.3.2 Adjacent to building.** Keep all trees, shrubs, and other vegetation or portions thereof, adjacent to or overhanging any building or structure free of dead limbs, branches, and other combustible matter.

**4908.3.3 Roof clearance.** Maintain 5 feet (1.524 m) of vertical clearance between roof surfaces and portions of trees or shrubs overhanging any building or structure.

**4908.3.4 Chimney clearance.** Remove any portion of a tree or shrub which extends within 15 feet (3.048 m) of the outlet of a chimney or stovepipe.

**4908.3.5 Roof surface.** Maintain the roofs of all buildings or structures free of leaves, needles, twigs, and other combustible matter.

**4908.3.6 Building clearance--30 feet.** Maintain all hazardous grass, weeds, and small shrubs within 30 feet (9.144 m) of any building or structure. Hazardous vegetation must be maintained less than 3 inches (76 mm) high; cut grass may be left on the slope to protect the soil if it lays down within 3 inches (76 mm) of the ground. Large native shrubs may be retained no closer than an average of 18 feet (5.486 m) apart, provided the lower branches have been trimmed a minimum of 3 feet (914 mm) above the ground, or at least thinned to reduce the available fuel volume.

**4908.3.7 Roads.** Maintain trees and shrubs within 10 feet of that portion of any highway, street, alley, or driveway which is improved or used for vehicle travel or other vehicular purposes (except for designated fire roads), so that no leafy foliage, twigs, or branches are within six (6) feet (1.828 m) of the ground (but no more than 1/3 of the crown).

**4908.3.8 Combustible fences.** Maintain all hazardous grass, weeds and other vegetation located within 10 feet (3.048 m) of any combustible fence at a height of not more than 3 inches (76 mm). This shall not require the removal of trees, ornamental shrubbery or plants which are used as ground cover, provided such do not provide a ready fuel supply to augment the spread or

intensity of a fire.

**4908.3.9 Building clearance--100 feet.** Maintain all hazardous grass, weeds, shrubs and trees within 100 feet (30.480 m) of any building or structure. Grass and small shrubs may be retained on steep slopes to stabilize the soil and prevent erosion, but may not exceed a height of 18 inches (457 mm). Large native specimen shrubs should be retained where possible, but no closer than an average of 18 feet (5.486 m) apart. Remove all dead foliage, twigs or branches, or live branches within 3 feet (914 mm) of the ground, from mature trees and shrubs (but no more than 1/3 of the crown).

**4908.3.10 Cut vegetation and refuse.** Remove and/or safely dispose of all cut vegetation and hazardous refuse.

**4908.3.11 Soil erosion control.** If the abatement of hazardous vegetation results in the exposure of bare mineral soil, or the soil is exposed to such an extent that increased soil erosion would be likely, or the Chief or his designee determines that the abatement has been excessive and poses a threat to the public health, safety or welfare, irrigation and landscaping or a suitable erosion control structure must be provided to establish effective soil erosion control.

**4908.3.12 Minimum requirements.** Nothing contained in this section shall be deemed to preclude the Chief from requiring more than the minimum specific requirements set forth above when the Chief determines that conditions exist which necessitate greater fire protection measures.

**4908.4 Notice.** The Council finds that grass, weeds, shrubs, trees, or other vegetation prohibited under Sec. 4908.3 increase the danger of fire and thus constitute a public nuisance. If such condition exists, the San Marino Fire Department shall give notice to the owner of record to abate the nuisance within 30 days. The notice shall state that the owner is required to abate the nuisance and that if the nuisance is not abated the City may take further action which can include, (1) the City, or its contractor, may enter upon the parcel of land and remove or otherwise eliminate or abate the nuisance, (2) that upon completion of such work the cost thereof, including administrative costs, shall become a special assessment against that parcel, and (3) that upon Council confirmation of the assessment and recordation of that order, a lien shall attach to the parcel to be collected on the next regular property tax bill levied against the parcel.

**SECTION 10.** New Article 13 Green Building Standards Code is hereby added to Chapter 25 of the San Marino City Code to read as follows:

## Article 13

## GREEN BUILDING STANDARDS CODE

**SECTION:**

**25.13.06 Amendment of Section 5.408.3**
**25.13.07 Addition of Section 601.1**
**25.13.08: Violations**

**25.13.01: GREEN BUILDING STANDARDS CODE ADOPTED**: Except as hereinafter provided, the mandatory measures of the California Green Building Standards Code, 2013 Edition, as published by the California Building Standards Commission, are hereby adopted by reference and incorporated herein as though fully set forth herein and shall constitute the Green Building Standards Code of the City. A copy of said Code shall be located in the Planning and Building Department and shall be, at all times, maintained by the Planning and Building Department for use and examination by the public.

**25.13.02: ADDITION OF SECTION 101.12:** Notwithstanding the provisions of Section 25.13.01 of this Article, Section 101.12 is added to the Green Building Standards Code to read as follows.

**101.12 Fee for Mandatory Measures.** The fee for each plan check/permit shall be as periodically established by City Council resolution.

**25.13.03: AMENDMENT OF SECTION 202:** Notwithstanding the provisions of Section 25.13.01 of this Article, Section 202 of the Green Building Standards Code is amended by adding a definition to read as follows:

**SUSTAINABILITY**. Consideration of present development and construction impacts on the community, the economy, and the environment without compromising the needs of the future.

**25.13.04: AMENDMENT OF SECTION 301.1:** Notwithstanding the provisions of Section 25.13.01 of this Article, Section 301.1 of the Green Building Standards Code is amended to read as follows:

**301.1 Scope.** Buildings shall be designed to include the green building measures specified as mandatory this code. Voluntary green building measures are also included in this code the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless they are adopted by a city or county as specified in Section 101.7.

**25.13.05: AMENDMENT OF SECTION 301.1.1:** Notwithstanding the provisions of Section 25.13.01 of this Article, Section 301.1.1 of the Green Building Standards Code is amended to read as follows:

**Section 301.1.1 Additions and alterations. [HCD]** The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings. Code sections relevant to additions and alterations shall only apply to the portions of the building being added or altered within the scope of the permitted work.

**25.13.06: AMENDMENT OF SECTION 5.408.3:** Notwithstanding the provisions of Section 25.13.01 of this Article, Section 5.408.3 of the Green Building Standards Code is

amended to read as follows:

**5.408.3 Excavated soil and land clearing debris [BSC]** 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed.

**Exception**: Reuse, either on-or off-site, of vegetation or soil contaminated by disease or pest infestation.

**Notes**:

1. If contamination by disease or pest infestation is suspected, contact the County Agricultural Commissioner and follow its direction for recycling or disposal of the material. (www.cdfa.ca.gov/exec/ county/county_contacts.html)

2. For a map of known pest and/or disease quarantine zones, consult with the California Department of Food and Agriculture. (www.cdfa.ca.gov)

3. Contaminated soil shall not be reused and shall be disposed of or remediated in accordance with relevant regulations.

**25.13.07: ADDITION OF SECTION 601.1:** Notwithstanding the provisions of Section 25.12.01 of this Article, Section 601.1 is added to the Green Building Standards Code to read as follows:

**601.1.** This section lists the organization and standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard.

**25.13.08: VIOLATIONS**: Any person, firm or corporation violating any of the provisions or failing to comply with any of the mandatory requirements of this Article shall be guilty of a misdemeanor and upon conviction thereof shall be punishable as provided in subsection 01.04.03A of this Code. Each such person shall be guilty of a separate offense for each and every day during any portion of which any violation of any provision of this Article is committed, continued or permitted by any such person, and he/she shall be punishable as herein provided.

**SECTION 11.** New Article 14 Referenced Standards Code is added to Chapter 25 of the San Marino City Code, to read as follows:

## Article 14

## REFERENCED STANDARDS CODE

**SECTION:**

**25.14.01 Referenced Standards Code Adopted**

**25.14.01: REFERENCED STANDARDS CODE ADOPTED**: Except as hereinafter provided, the California Referenced Standards Code, 2013 Edition, as published by the California Building Standards Commission, is hereby adopted by reference and incorporated herein as though fully set forth herein and shall constitute the Referenced Standards Code of the City. A copy of said Code shall be located in the Planning and Building Department and shall be, at all times, maintained by the Planning and Building Department for use and examination by the public.

SECTION 12. It shall be unlawful for any person, firm, partnership, or corporation to violate any provision or to fail to comply with any of the requirements of this Ordinance or any of the Codes hereby adopted. Unless deemed to be an infraction, any person, firm, partnership or corporation violating any provision of this Ordinance or any of the Codes hereby adopted or failing to comply with any of their requirements shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished by a fine not exceeding one thousand dollars ($1,000.00), or by imprisonment not exceeding six (6) months, or by both such fine and imprisonment. Each and every person, firm, partnership, or corporation shall be deemed guilty of a separate offense for each and every day or any portion thereof during which any violation of any of the provisions of this Ordinance or the Codes hereby adopted is committed, continued or permitted by such person, firm, partnership or corporation, and shall be deemed punishable therefore as provided in this Ordinance.

SECTION 13. The City Council declares that, should any provision, section, paragraph, sentence or word of this Ordinance or the Codes hereby adopted be rendered or declared invalid by any final court action in a court of competent jurisdiction, or by reason of any preemptive legislation, the remaining provisions, sections, paragraphs, sentences and words of this Ordinance and the Codes hereby adopted shall remain in full force and effect.

**SECTION 14**. The City Clerk shall certify to the passage and adoption of this ordinance; shall cause the same to be entered in the book of original ordinances of said City; and shall make a minute of the passage and adoption thereof in the records of the meeting at which the same is passed and adopted.

PASSED, APPROVED AND ADOPTED THIS 11th DAY OF DECEMBER, 2013.

Richard Ward

RICHARD WARD,
MAYOR

ATTEST:

Veronica Ruiz

VERONICA RUIZ, CMC
CITY CLERK

STATE OF CALIFORNIA )
COUNTY OF LOS ANGELES ) ss.
CITY OF SAN MARINO )

**I HERBY CERTIFY** that the foregoing Ordinance No. O-13-1278, was introduced at a Regular Meeting of the City Council held on the 13th day of November, 2013, and was approved and adopted at a Regular Meeting of the City Council held on the 11th day of December, 2013, by the following vote:

AYES: COUNCIL MEMBERS: EUGENE SUN, RICHARD SUN, ALLAN YUNG, VICE-MAYOR DENNIS KNEIER AND MAYOR RICHARD WARD

NOES: NONE

ABSTAIN: NONE

ABSENT: NONE

Veronica Ruiz

VERONICA RUIZ, CMC
CITY CLERK

# RESOLUTION NO. R-13-26

## A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN MARINO MAKING EXPRESS FINDINGS AND DETERMINATIONS THAT MODIFICATIONS TO CODES COMPRISING THE 2013 CALIFORNIA BUILDING STANDARDS CODE ARE REASONABLY NECESSARY BECAUSE OF LOCAL CLIMATIC, GEOLOGICAL OR TOPOGRAPHICAL CONDITIONS

**WHEREAS**, Section 17958 of the California Health and Safety Code provides that the City may make such changes or modifications to building standards set forth in codes comprising the 2013 California Building Standards Codes as it determines are reasonably necessary because of local climatic, geological or topographical conditions.

**WHEREAS**, Ordinance No. O-13-1278 adopts the 2013 editions of the California Building, Residential, Plumbing, Mechanical, Electrical, Fire, Energy, Administrative, Green Building Standards, and Referenced Standards Codes, including various modifications to building standards and other provisions contained in said codes.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SAN MARINO HEREBY FINDS, DETERMINES, ORDERS AND RESOLVES AS FOLLOWS:**

**SECTION 1**. Findings supporting local amendments. The modifications to Codes comprising the 2013 California Building Standards Code that have been enacted are a continuation of the San Marino Building Code. The City Council expressly finds that all of the changes and modifications to such Codes, whether previously enacted or enacted in this ordinance, are reasonably necessary because of local climate characterized by hot, dry summers, followed by strong Santa Ana winds and heavy winter rains, the location in Southern California, the relatively flat topography of the City and the location of the Raymond fault within the City.

A. Specifically, the City Council hereby finds that the modifications to the California Building Code regarding roof coverings (Sections 1505.3.1), the modifications to the California Fire Code regarding citations (Section 109.3.5), open flame cooking devices (Section 308.1.4), key boxes and switches (Section 506.1.3), fire sprinkler system (Section 903.2), fire alarm system (Section 907.2), Automatic sprinkler systems (Section 907.6.5), Tents and membrane structures (Section 3103.2) fireworks (Section 5608.2) are reasonably necessary to the health, safety and general welfare of the residents of the City due to the following local climatic, topographic and geological condition:

1. The city is located in an area climatically classified as arid and prone to hot, dry Santa Ana winds of high velocity. Santa Ana winds are unique to this region of Southern California. Moreover, due to the arid nature of the area, the weather during Santa Ana conditions tends to be hot, dry and windy. The hot, dry and windy weather conditions are very hazardous to populated areas insofar as flame spread is concerned.

2. Because of the above-described climatic conditions, the City and the surrounding cities have historically suffered from occasional structural fires. These have often

been difficult to control due to the relatively flat topography of the City and the dry winds carrying sparks and cinders to surrounding structures.

3. The city is located in a seismically active area, bisected by the Raymond Fault, and it is reasonably foreseeable that an earthquake would render the City particularly vulnerable to devastation.

4. Because of the above-described geological conditions, the City, in the event of an earthquake, may be unable to dispatch an adequate number of fire personnel with apparatus to suppress fires and conduct rescue operations. Moreover, the conditions within the City likewise occur in surrounding communities, thereby rendering mutual aid assistance problematic.

B. The City Council hereby further finds that the modifications to the California Building Code regarding garage floor construction (Section 312.3) is reasonably necessary for the health, safety, and general welfare of the residents of the City resulting from geological characteristics of the City, which include proximity to active earthquake fault zones.

C. The City Council hereby further finds that the modifications to the California Building Code regarding asphalt shingles (Section 1507.2.5.1) are reasonably necessary for the health, safety, and general welfare of the residents of the City resulting from the following climatic and topographical conditions:

The City is subject to heavy winter rains, which in combination with the City's high water table, requires steps to prevent the rotting of wood.

D. The City Council hereby further finds that the selected recommended technical amendments and additions to the 2013 California Building and Residential Codes from the Los Angeles Regional Uniform Code Program (Building Code Sections 1507.3.1, 1613.6.1, 1613.6, 1613.8, 1613.7, 1613.10, 1704.4, 1704.8, 1704.5.1, 1705.3, 1705.11, 1711.1.1, 1807.1.4, 1807.1.6, 1809.3, 1809.7, 1809.1.2, 1810.3.2.4, 1905.1.3, 1905.1.8, 1905.1, 1905.1.10, 1905.1.12, 1905.1.11, 2304.9, 2304.4.11.7, 2305.4, 2305.5, 2306.2, 2306.3, 2307.2, 2308.3.4, 2308.9.3.1, 2308.9.3.2, 2308.9.3.2, 2308.12.4, 2308.12.5, Residential Code Sections R301.2.2.1.1, R301.2.2.2.5, R301.2.2.3.8, R401.1, R403.1, R404.2, R501.1, R503.2.4, R602.3(1), R602.3(2), R602.3.2, R602.10.3(3), R602.10.2.3, R602.10.4, R602.10.5, R602.10.6.1, R602.10.6.2, R602.10.9.1, R606.2.4, R803.2.4, R1001.3.1 and Green Code Sections 101.12, 202, 301.1, 301.1.1, 5.408.3, 601.1) are reasonably necessary for the health, safety, and general welfare of the residents of the City resulting from the following geological condition:

The City is located in a seismically active area, bisected by the Raymond Fault, and among a vast array of other fault systems capable of producing major earthquakes. It is reasonably foreseeable that an earthquake would render the City particularly vulnerable to devastation.

E. The City Council hereby further finds that the other modifications to the 2013 California Codes are administrative or procedural in nature and necessary to allow the application of such codes by procedures suited to the size and nature of the City and its staff. The changes

made also include provisions to make each of said Codes consistent with other Codes enforced by the City.

**SECTION 2.** The City Clerk shall certify to the adoption of this resolution and shall cause a certified copy of the same and the ordinance to be forthwith transmitted to the California Building Standards Commission.

**PASSED, APPROVED, AND ADOPTED** this 13th day of November 2013.

Richard Ward
RICHARD WARD
MAYOR

ATTEST:

Veronica Ruiz
VERONICA RUIZ, CMC
CITY CLERK

APPROVED AS TO FORM:

STEVEN L. DORSEY
CITY ATTORNEY

STATE OF CALIFORNIA )
COUNTY OF LOS ANGELES ) ss.
CITY OF SAN MARINO )

I, Veronica Ruiz, City Clerk of the City of San Marino, California, do hereby certify that the foregoing Resolution No. R-13-26 was adopted by the City Council of the City of San Marino at a Regular Meeting of the City Council held on the 13th day of November, 2013, by the following vote:

AYES: COUNCIL MEMBERS: EUGENE SUN, RICHARD SUN, ALLAN YUNG, VICE-MAYOR DENNIS KNEIER AND MAYOR RICHARD WARD

NOES: NONE

ABSTAIN: NONE

ABSENT: NONE

Veronica Ruiz
VERONICA RUIZ, CMC
CITY CLERK